NX-507 RELAY EXPANDER NX-508 OUTPUT EXPANDER Installation Manual

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GENERAL DESCRIPTION

The NetworX NX-507 and NX-508 are auxiliary modules used to expand the capabilities of the NetworX control panels. While each unit has some unique features described in this section and also in the terminal descriptions, the basic installation and programming instructions are applicable to both modules.

NX-507 SEVEN RELAY EXPANDER

- \$ microprocessor controlled 7-relay module
- \$ designed with 7 separate normally open and normally closed relay contacts for a variety of applications, including access control, home control/automation, wireless interfaces, and security functions. NOTE: Access control and home automation have not been verified by UL testing.
- \$ includes 1 low current trigger output (Output 8)
- \$ up to 8 modules can be connected to the NetworX control panel
- \$ can be programmed to activate for an event in any or all partitions
- \$ each relay can be programmed to follow up to 8 different schedules to either activate the relay during the Aon@time, or used in conjunction with another programming option to create time zones
- \$ has an optional Tamper switch and Auxiliary power terminal (see terminal descriptions) making it ideal for use in a remote location

NX-508 EIGHT OUTPUT EXPANDER

- \$ microprocessor controlled 8-output module
- \$ equipped with 8 low current trigger outputs (see terminal drawing)
- \$ up to 8 modules can be added for a total output count of 64
- \$ each output can be programmed to follow up to 8 different schedules to either activate the output during the Aon® time, or used in conjunction with another programming option to create time zones
- \$ has an optional Tamper switch and Auxiliary power terminal (see terminal descriptions) making it ideal for use in a remote location
- \$ has a built-in parallel interface for local printouts of all communicator activity

WIRING INFORMATION

NX-507 (ALL RELAYS ACTIVE)	NX-507 (NO RELAYS ACTIVE) and NX-508						
Maximum Wire Run	Maximum Wire Ruito N	n When Connected	Maximum Wire Ru	n When Connected			
Connected to NX-8		IX-8	to N	X-320			
or NX-320	Using AUX	NOT using Aux	Using AUX	NOT using Aux			
250= = 20 AWG	250= = 24 AWG	250= = 24 AWG	250= = 22 AWG	500= = 22 AWG			
500= = 16 AWG	500= = 20 AWG	750= = 24 AWG	500= = 18 AWG	750= = 20 AWG			
1000= = 14 AWG	1000= = 18 AWG	1000= = 22 AWG	1000= = 16 AWG	1000= = 20 AWG			
1500= = 12 AWG	1500= = 16 AWG	2000= = 20 AWG	1500= = 14 AWG	2000= = 16 AWG			
2500= = 10 AWG	2500= = 14 AWG	2500= = 18 AWG	2500= = 12 AWG	2500= = 16 AWG			

		NX-507 TERMINAL DESCRIPTION
ļ	DATA	Connect to the control panel DATA terminal. This terminal is the data signaling terminal to all the devices on the buss.
	СОМ	Connect to the control panel COMMON terminal. This terminal supplies the common side of the power to the NX-507 board.
	POS	Connect to control panel AUX POWER + terminal. This terminal supplies power to the NX-507 board.
	ТАМ	This is an option tamper terminal. To use this feature, connect the normally closed tamper switch between this terminal and COM . If this feature is not used, a jumper must be connected between this terminal and common.
	СОМ	Connect to the tamper terminal through a normally closed contact.
	AUX	This terminal can supply up to 100 mA fused separate from the power in the control panel. NOTE : Any power drain from this terminal should be included in total current draw from the NetworX Control Panel or NX-320 Power Supply as applicable. This allows an isolation of the power between the main control and remote devices. If a short is created past the AUX terminal, those devices will cease to function, but the other devices, including the NX-507, will continue to operate. The NX-507 will report this problem to the control for display on the keypad as an expander power trouble.
NY 7	7NC	Normally closed dry contact rated 1 Amp at 30 Volts.
ELA	7COM	Common dry contact rated 1 Amp at 30 VDC.
R	7NO	Normally open dry contact rated 1 Amp at 30 Volts.
RELAYS 1-6		Same as Relay 7 shown above.
OUTPUT 8		Open collector output that switches to GND when activated - capable of up to 100 mA. NOTE: If device is connected to output, it must see the transition from 13V to GND. Caddx Part #8915 can be used to connect to Output 8.

NX-507 DRAWING



	NX-508 TERMINAL DESCRIPTION
DATA	Connect to the control panel DATA terminal. This terminal is the data signaling terminal to all the devices on the buss.
СОМ	Connect to the control panel COMMON terminal. This terminal supplies the common side of the power to the NX-508 board.
POS	Connect to control panel AUX POWER + terminal. This terminal supplies power to the NX-508 board.
ТАМ	This is an optional tamper terminal. To use this feature, connect the normally closed tamper switch between this terminal and COM . If this feature is not used, a jumper must be connected between this terminal and common.
СОМ	Connect to the tamper terminal through a normally closed contact.
AUX	This terminal can supply up to 100 mA fused separate from the power in the control panel. NOTE: Any power drain from this terminal should be included in total current draw from the NX-8 or NX-320 as applicable. This allows an isolation of the power between the main control and remote devices. If a short is created past the AUX terminal, those devices will cease to function, but the other devices, including the NX-508, will continue to operate. The NX-508 will report this problem to the control for display on the keypad as an expander power trouble.
Out 1- 8	Open Collector outputs that switch to GND when activated - capable of up to 100 mA. NOTE : If device is connected to outputs, it must see the transition from 13V to GND. The enclosed resistors must be used. Connect the resistor between AUX and the output being used.

NX-508 DRAWING



INSTALLING THE NX-507 AND NX-508

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 address use the table below. **NOTE: Dip switch 4 is used to disable the Tamper feature. ("On" = enabled / "Off" = disabled)**

Address	Dip Switch 1	Dip Switch 2	Dip Switch 3
24	ON	ON	OFF
25	OFF	OFF	ON
26	ON	OFF	ON
27	OFF	ON	ON
28	ON	ON	ON
29	OFF	OFF	OFF
30	ON	OFF	OFF
31	OFF	ON	OFF

ENROLLING THE NX-507 AND NX-508

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 AService[®] 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 AService[®] LED will illuminate.

PROGRAMMING THE AUXILIARY MODULES

The Program Mode is accessed by entering [*]-[8] (all of the function key LEDs will begin to flash). Enter the "Go To Program" code (default is [9]-[7]-[1]-[3]). If the code was valid, the Service LED will flash, and the function LEDs will illuminate steady, indicating the device to program should be entered. Next, enter the address of the NX-508 you wish to program followed by [#] (see Dip Switch chart on page 5). At this point, the Armed LED will illuminate while it is waiting for a programming location to be entered. Enter the desired programming location. The Armed LED will begin to flash while a programming location is being entered. Enter the [#] key. If this is a valid location, the Armed LED will extinguish, the Ready LED will illuminate, and the binary data for the first segment of this location will be shown on the zone LEDS. To change the data, enter the data followed by [*]. The data will be entered, and the location will automatically increment to the next segment. The data for that segment will be displayed. This procedure is repeated until the last segment is reached. Pressing the [#] key will exit from this location. To review the data, repeat the above procedure, pressing the [*] key without entering data first. Each time the [*] key is pressed, the next segment is displayed. Programming data is always one of two types of data. The first type is numerical, and can take on values from 0-255 or 0-15 depending on the segment size. The second type is a feature selection type. Feature selection data is used to turn features on or off. LCD Keypad Users Note: 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 LOCATIONS

LOCATION 0 PROGRAMMING THE EVENT, ZONE AND TIME FOR OUTPUT 1

(3 segments of numerical data) Location 0 is used to select the particular function, zone number, and time for an output to trip.

Segment 1 (EVENT)	Selects the event that will trigger the output. See chart below for the specific events that can be selected.
Segment 2 (ZONE/USER)	Selects the zone or user number necessary to trigger an output. If this location is programmed as a zero, any zone or user will activate the output. (See also loc.68, page 8)
Segment 3 (TIME)	Selects the amount of time an output will remain activated when an output triggers. If this location is programmed as a zero, the output will follow the particular event.

#	Event	#	Event	#		Event
0 √	Burglary Alarm	18	Entry	36		Program Mode
1 √	Fire Alarm	19	Exit	37		Download
2 √	24 Hour Alarm	20	Entry or Exit	38		Ground Fault
3 √	Zone Trouble	21	Armed	39		Over Current
4 √	Zone Tamper	22	Not Armed	40		Box Tamper
5	Burglary Siren	23	Ready	41		Siren Tamper
6	Fire Siren	24	Not Ready	42		Any Zone Faulted
7	Any Siren	25	Fire	43	Ł	Any Alarm
8	Zone Bypass	26	Fire Trouble	44		Keypad Beeping
9	AC Failure	27	Chime	45	Ł	Code Entry
10	System Low Battery	28 √	Expander Trouble	46	⊠	Key FOB Function 1
11 √	Duress	29	Dynamic Battery Test	47	⊠	Key FOB Function 2
12 √	Manual Fire	30	Open Schedule 🛠	48		Auto Arm Control
13 √	Aux 2 Keypad	31	Closed Schedule 🛠	49		Auto Disarm Control
14 √	Keypad Panic	32	Listen In	50		Auto Arm & Disarm Control
15	Keypad Tamper	33	Line Seizure	51		Follow schedule of NX-508
16 √	Automatic Test	34	Failed to Communicate	52		Flash X-10 for Alarm Memory
17	Alarm Memory	35	Telephone Line Fault	53		Flash X-10 for Siren

***** See loc 52 & 53 in NX-8 $\sqrt{}$ If set to follow condition, these events will be 1 second.

Events 46 & 47 require NX-408, NX-416, or NX-448 wireless receivers to operate.

Events 48, 49, and 50 will arm or disarm the NX-8 at the open (disarm) or close (arm) time for the appropriate schedule. See example 3 on page 7.

LOCATION 1 PROGRAMMING SPECIAL FUNCTIONS AND PARTITIONS FOR OUTPUT 1 (2 segments of binary data)

Segment 1 Selects the following special conditions:

- LED 1 "On" if output should time in minutes; "Off" if output times in seconds.
- LED 2 "On" if output should latch until a code is entered.
- LED 3 "On" if output should reset if a code is entered while it is being timed.
- LED 4 "On" if output should only trigger during a closed schedule.
- LED 5 "On" if output should only trigger during an open schedule.
- LED 6 "On" if the output should be inverted.

LED 7 - "On" if a trigger should be logged in the event buffer. See chart.

Address	Output
24	1-8
25	9-16
26	17-24
27	25-32
28	33-40
29	41-48
30	49-56
31	57-64

Segment 2 Selects the following partitions:

LED 1 - "On" if the event should activate when it occurs in Partition 1. LED 2 - "On" if the event should activate when it occurs in Partition 2. LED 3 - "On" if the event should activate when it occurs in Partition 3. LED 4 - "On" if the event should activate when it occurs in Partition 4. LED 5 - "On" if the event should activate when it occurs in Partition 5. LED 6 - "On" if the event should activate when it occurs in Partition 6. LED 7 - "On" if the event should activate when it occurs in Partition 7. LED 8 - "On" if the event should activate when it occurs in Partition 7.

LOCATION 2 ENABLING THE SCHEDULES FOR OUTPUT 1

(1 segment of binary data) Location 2 is used to enable any or all of the eight (8) schedules. LED 1 corresponds to Schedule 1 (see locations 32-34, page 8) and LED 8 corresponds to Schedule 8 (see locations 53-55, page 8). This location can be used in conjunction with the Special Function location to create an output that will only activate during certain times and/or certain days.

- LED 1 "On" if the event should follow Schedule 1.
- LED 2 "On" if the event should follow Schedule 2.
- LED 3 "On" if the event should follow Schedule 3.
- LED 4 "On" if the event should follow Schedule 4.
- LED 5 "On" if the event should follow Schedule 5.
- LED 6 "On" if the event should follow Schedule 6.
- LED 7 "On" if the event should follow Schedule 7.
- LED 8 "On" If the event should follow Schedule 8.

LOCATION 3 PROGRAMMING THE X-10 ADDRESS FOR OUTPUT 1

(2 segments of numerical data)

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

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 Program a number from 0-15 to represent the corresponding X-10 *House code* from the following table.

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=0			
3=D	7=H	11=L	15=P			

LOCATIONS 4 - 31 PROGRAMMING FOR OUTPUTS 2- 8

Locations 4 - 31 are used to program the events, zones and times, as well as the special functions, partitions, schedules and X-10 addresses for Outputs 2 - 8. Each output has four locations which are programmed with the same steps as Output 1 described previously. Refer to Output 1 for specific instructions (locations 0 - 3, pages 6 and 7). Also refer to the worksheets beginning on page 12.

LOCATION 32 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. (1:00 PM = 13)Segment 2 Program the minutes after the hour of the opening time for Schedule 1.

LOCATION 33 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. (1:00 PM = 13)Segment 2 Program the minutes after the hour of the closing time for Schedule 1.

LOCATION 34 PROGRAMMING THE DAYS FOR SCHEDULE 1

(1 segment of numerical data)

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

LOCATIONS 35 - 55 PROGRAMMING FOR SCHEDULES 2-8

(2 segments of numerical data) Locations 35 - 55 are used to program the opening times, closing times, and days for Schedules 2 - 8. Each schedule has three locations which are programmed with the same steps as Schedule 1 described previously. Refer to Schedule 1 (locations 32 - 34 above) for specific instructions and the worksheets beginning on page 12.

LOCATION 56 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).

LOCATIONS 57-67 PROGRAMMING THE DATE OF HOLIDAYS FROM FEBRUARY TO DECEMBER

(8 segments of numerical data) Locations 57 - 67 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 56 described previously. Refer to worksheets.

LOCATION 68 AUTHORIZING USERS 1-10 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code (event #45), location 68 can be used to restrict certain codes from activating certain outputs. Location 68 contains 10 segments. Segment 1 corresponds to user 1, Segment 10 corresponds to user 10. The LEDs correspond to outputs 1 - 8. **NOTE: The zone/user for the corresponding output must be "0" to use this location.**

LED	DESCRIPTION
1	"On" if code will activate Output 1; "Off" if it will not.
2	"On" if code will activate Output 2; "Off" if it will not.
3	"On" if code will activate Output 3; "Off" if it will not.
4	"On" if code will activate Output 4; "Off" if it will not.
5	"On" if code will activate Output 5; "Off" if it will not.
6	"On" if code will activate Output 6; "Off" if it will not.
7	"On" if code will activate Output 7; "Off" if it will not.
8	"On" if code will activate Output 8; "Off" if it will not.

LOCATION 69 AUTHORIZING USERS 11-20 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 69 can be used to restrict certain codes from activating certain outputs. Location 69 contains 10 segments. Segment 1 corresponds to user 11, Segment 10 corresponds to user 20. The LEDs correspond to outputs 1 - 8. Refer to location 68 chart.

LOCATION 70 AUTHORIZING USERS 21-30 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 70 can be used to restrict certain codes from activating certain outputs. Location 70 contains 10 segments. Segment 1 corresponds to user 21, Segment 10 corresponds to user 30. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

LOCATION 71 AUTHORIZING USERS 31-40 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 71 can be used to restrict certain codes from activating certain outputs. Location 71 contains 10 segments. Segment 1 corresponds to user 31, Segment 10 corresponds to user 40. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

LOCATION 72 AUTHORIZING USERS 41-50 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 72 can be used to restrict certain codes from activating certain outputs. Location 72 contains 10 segments. Segment 1 corresponds to user 41, Segment 10 corresponds to user 50. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

LOCATION 73 AUTHORIZING USERS 51-60 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 73 can be used to restrict certain codes from activating certain outputs. Location 73 contains 10 segments. Segment 1 corresponds to user 51, Segment 10 corresponds to user 60. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

LOCATION 74 AUTHORIZING USERS 61-70 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 74 can be used to restrict certain codes from activating certain outputs. Location 74 contains 10 segments. Segment 1 corresponds to user 61, Segment 10 corresponds to user 70. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

LOCATION 75 AUTHORIZING USERS 71-80 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 75 can be used to restrict certain codes from activating certain outputs. Location 75 contains 10 segments. Segment 1 corresponds to user 71, Segment 10 corresponds to user 80. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

LOCATION 76 AUTHORIZING USERS 81-90 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 76 can be used to restrict certain codes from activating certain outputs. Location 76 contains 10 segments. Segment 1 corresponds to user 81, Segment 10 corresponds to user 90. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

LOCATION 77 AUTHORIZING USERS 91-99 FOR OUTPUTS 1-8

(10 segments of binary data) When activating outputs with a user code, location 77 can be used to restrict certain codes from activating certain outputs. Location 77 contains 9 segments. Segment 1 corresponds to user 91, Segment 9 corresponds to user 99. The LEDs correspond to outputs 1 - 8. Refer to chart on page 8, location 68.

ENCLOSURE DIAGRAM

Inside the can, several 2-holed insertion points have been constructed. This allows for either vertical or horizontal placement of the modules. Notice that the insertion points have two sizes of holes -- a larger hole and a smaller hole.

Diagram 1: The black plastic PCB guides are grooved on one edge where the PC Board will be seated. The end with the half-moon protrusion fits into the larger hole. The smaller hole is for the screw.

Diagram 2: Place the *first* black plastic PCB guide in the top insertion point, grooved edge downward. The half-moon protrusion will be in the large hole. It does not require force. Insert one of the provided screws into the smaller hole (from inside the can) to secure it in place. A screwdriver should reach through the notch that runs the length of the guide to tighten the screw. The *second* PCB guide should be positioned opposite of the first (grooved edge up) and placed in the lower insertion point, using the same procedures described above. Once mounted, screw it in securely.

Diagram 3: The PC board should slide freely in the grooves of both guides.





PROGRAMMING EXAMPLES

Possible application for NX-508 outputs:

- Example #1 Turn on entryway light upon entry only during night time.
- Example #2 Turn a device on or off during business hours.
- Example #3 Arm the system. <u>NOTE TO EXAMPLE #3</u>: The opening time is defaulted to 0800 for all schedules. With this example, the NX-508 will try to Auto Arm after every 45 minutes of inactivity on the Ready LED, from closing time to opening time.

(Feature Selections to be programmed are shown in **bold italics** text.)

Example #1 To have Output #1 trip and activate an X-10 module with House code C and Unit Code 4 for 6 minutes when Zone 1 is faulted only from 5:00 p.m. to 9:00 a.m., program the following: **Example #2** To have output 5 trip and activate an X-10 module with a House code of P and a Unit code of 8 from 9:00 a.m. to 5:00 p.m. Monday to Friday, but not at all on Saturday or Sunday, program the following: **Example #3** To have Output 3 Auto Arm partitions #1 & 2 at 7:00 p.m. Monday thru Friday, 9:00 p.m. Saturday, but not at all on Sunday, program the following:

LOC	SEGMEN	ΝT	
	1	2	3
0	42	1	6
1	LED 1 2 3 4 5 6 7 8		
2	1 2 3 4 5 6 7 8		
3	3	2	
32	9	0	
33	17	0	
34	1 2 3 4 5 6 7		

8

LOC	SEGMEN		
	1	2	3
16	51	0	0
17	LED 1 2 3 4 5 6 7 8		
18	1 2 3 4 5 6 7 8		
19	7	15	
32	9	0	
33	17	0	

LOC	SEGME	NT	
	1	2	3
8	48	3	10
9		LED 1 2 3 4 5 6 7 8	
10	1 2 3 4 5 6 7 8		
33	19	0	
36	21	0	
37	1 2 3 4 5 6 7 8	0	
38	0	0	
39	23	59	
40	1 2 3 4 5 6 7 8		

PROGRAMMING WORKSHEETS

LOC	PAGE	DESC	RIPTION	DEFAULT	DATA
0	6	Output 1 Event, Zone, Tir	ne	43 1 10	
1	6	Output 1 Special Function			
		Segment 1		Segment 2	
		1 = "On" if output should t	ime in minutes; "Off" if output	1 = Partition 1	1
		times in seconds		2 = Partition 2	2
		2 = "On" if output should la	atch until a code is entered	3 = Partition 3	
		s = On in output shou while it is being timed	a reset il a code is entered	4 = Partition 4	
		4 = "On" if output should	only trigger during a closed	6 = Partition 6	
		schedule		7 = <i>Partition</i> 7	,
		5 = "On" if output should	only trigger during an open	8 = Partition 8	1
		6 = "On" if the output shou	Ild be inverted		
		7 = "On" if a trigger should	be logged in event buffer		
2	7	Output 1 Schedule			
		1 = Schedule 1	5 = Schedule 5		
		2 = Schedule 2	6 = Schedule 6		
		3 = Schedule 3	7 = Schedule 7		
2	7	4 = Schedule 4	8 = Schedule 8		
3	1	Culput 1 X-10 Address	•		
			0=A 4=E 8=L 12=M	0	
		Segment 2 House Code	0		
			3=D 7=H 11=L 15=P		
1	7	Output 2 Event Zone Tir	no	13 2 10	
-	7	Output 2 Event, 2016, 11	De Partition	43 2 10	
5	1	Sogment 1	15, F al 111011	Segment 2	
		1 = "On" if output should t times in seconds	ime in minutes; "Off" if output	1 = Partition 1 2 = Partition 2	
		2 = "On" if output should la	atch until a code is entered	3 = Partition 3	
		3 = "On" if output shoul	d reset if a code is entered	4 = Partition 4	!
		while it is being timed		5 = Partition 5	i
		4 = "On" if output should	only trigger during a closed	6 = Partition 6	
		5 = "On" if output should	7 = Partition 7		
		schedule	o – raruuon o		
		6 = "On" if the output shou	Ild be inverted		
6	7	i = "On" if a trigger should Output 2. Schedule	a be logged in event buffer		
0	(E - Sabadula E		
		i = Schedule 1 2 = Schedule 2	5 = Schedule 5 6 = Schedule 6		
		3 = Schedule 3	7 = Schedule 7		
		4 = Schedule 4	8 = Schedule 8		

LOC	PAGE	DESC	RIPTION	DEFAULT	DATA
7	7	Output 2 X-10 Address			
		Segment 1 Module Numb	1		
		Segment 2 House Code (See chart on page 12)	0	
8	7	Output 3 Event, Zone, Tir	43 3 10		
9	7	Output 3 Special Function	ns, Partition		
		Segment 1		Segment 2	
		1 = "On" if output should t times in seconds	ime in minutes; "Off" if output	1 = Partition 1 2 = Partition 2	2
		3 = "On" if output should a	d reset if a code is entered	3 = Partition 3	3
		while it is being timed		5 = Partition 5	+ 5
		4 = "On" if output should	only trigger during a closed	6 = Partition 6	5
		schedule 5 = "On" if output should	only trigger during an open	7 = Partition 7	7
		schedule	only angger during an open	8 = Partition 8	3
		6 = "On" if the output shou	Ild be inverted		
10	7	7 = "On" if a trigger should	be logged in event buffer		
10	'	1 = Sabadula 1	5 - Sabadula 5		
		2 = Schedule 2	6 = Schedule 6		
		3 = Schedule 3	7 = Schedule 7		
		4 = Schedule 4	8 = Schedule 8		
11	7	Output 3 X-10 Address			
		Segment 1 Module Numb	2		
		Segment 2 House Code (See chart on page 12)	0	
12	7	Output 4 Event, Zone, Tir	ne	43 4 10	
13	7	Output 4 Special Function	ns, Partition		
		Segment 1		Segment 2	
		1 = "On" if output should t	ime in minutes; "Off" if output	1 = Partition 1	1
		2 = "On" if output should la	atch until a code is entered	3 = Partition 3	<u>-</u> }
		3 = "On" if output shoul	d reset if a code is entered	4 = Partition 4	1
		while it is being timed	ank trinnan during a slagad	5 = Partition 5	5
		schedule	only ingger during a closed	6 = Partition 6) T
		5 = "On" if output should	only trigger during an open	8 = Partition 8	}
		schedule	ld be inverted		
		7 = "On" if a trigger should	l be logged in event buffer		
14	7	Output 4 Schedule			
		1 = Schedule 1	5 = Schedule 5		
		2 = Schedule 2	6 = Schedule 6		
		3 = Schedule 3	7 = Schedule 7		
15	7	4 - Schedule 4 Output 4 X-10 Address	o – Schedule ð		
10		Segment 1 Module Numb	er	3	
		Segment 2 House Code (See chart on page 12)	0	
16	7	Output 5 Event Zone Tim	no	V 12 5 10	
10	'	Sulput 5 Event, Zone, Th		43 3 10	

LOC	PAGE	DESC	RIPTION	DEFAULT	DATA
17	7	Output 5 Special Functior			
		Segment 1		Segment 2	
		1 = "On" if output should t	1 = Partition 1		
		times in seconds	tala uniti a sa da la antene d	2 = Partition 2	
		2 = "On" if output should la 3 = "On" if output should la	atch until a code is entered	3 = Partition 3	
		while it is being timed		4 = Partition 4 5 = Partition 5	
		4 = "On" if output should	only trigger during a closed	6 = Partition 6	
		schedule	and a talana an air air an an an an	7 = Partition 7	
		5 = "On" if output should schedule	only trigger during an open	8 = Partition 8	
		6 = "On" if the output shou	Ild be inverted		
		7 = "On" if a trigger should	be logged in event buffer		
18	7	Output 5 Schedule			
		1 = Schedule 1	5 = Schedule 5		
		2 = Schedule 2	6 = Schedule 6		
		3 = Schedule 3 4 = Schedule 4	7 = Schedule 7 8 = Schedule 8		
19	7	Output 5 X-10 Address			
		Segment 1 Module Numb	4		
		Segment 2 House Code	0		
20	7	Output 6 Event, Zone, Tir	ne	43 6 10	
21	7	Output 6 Special Function	ns, Partition		
		Segment 1		Segment 2	
		1 = "On" if output should t	ime in minutes; "Off" if output	1 = Partition 1	
		times in seconds 2 = "On" if output should la	atch until a code is entered	2 = Partition 2	
		3 = "On" if output should be	d reset if a code is entered	3 = Partition 3 4 = Partition 4	
		while it is being timed		5 = Partition 5	
		4 = "On" if output should	only trigger during a closed	6 = Partition 6	
		schedule 5 = "On" if output should	only trigger during an open	7 = Partition 7	
		schedule	only algor during an open	8 = Partition 8	
		6 = "On" if the output shou	Id be inverted		
	7	7 = "On" if a trigger should	be logged in event buffer		
22	1				
		1 = Schedule 1 2 = Schedule 2	5 = Schedule 5 6 = Schedule 6		
		3 = Schedule 3	7 = Schedule 7		
		4 = Schedule 4	8 = Schedule 8		
23	7	Output 6 X-10 Address			
		Segment 1 Module Numb	er	5	
		Segment 2 House Code	(See chart on page 12)	0	
24	7	Output 7 Event, Zone, Tir	ne	43 7 10	

LOC	PAGE	DESC	RIPTION	DEFAULT	DATA	
25	7	Output 7 Special Functior				
		Segment 1	Segment 2			
		1 = "On" if output should t	ime in minutes; "Off" if output	1 = Partition 1		
		times in seconds		2 = Partition 2		
		2 = "On" if output should la	atch until a code is entered	3 = Partition 3		
		3 = On If output shoul while it is being timed	a reset if a code is entered	4 = Partition 4		
		4 = "On" if output should	only trigger during a closed	5 = Partition 5 6 = Partition 6		
		schedule	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7 = Partition 7		
		5 = "On" if output should	only trigger during an open	8 = Partition 8		
		6 = "On" if the output shou	Ild he inverted			
		7 = "On" if a trigger should	be logged in event buffer			
26	7	Output 7 Schedule				
		1 = Schedule 1	5 = Schedule 5			
		2 = Schedule 2	6 = Schedule 6			
		3 = Schedule 3 4 = Schedule 4	7 = Schedule 7 8 = Schedule 8			
27	7	Qutput 7 X-10 Address	o – Schedule o			
		Segment 1 Module Numb	er	6		
		Segment 2 House Code (0			
28	7	Output 8 Event. Zone. Tin	43 8 10			
29	7	Output 8 Special Function				
		Segment 1		Segment 2		
		1 = "On" if output should t	ime in minutes; "Off" if output	1 = Partition 1		
		times in seconds		2 = Partition 2		
		2 = "On" if output should la	atch until a code is entered	3 = Partition 3		
		s = On II output shou while it is being timed	a reset il a code is entered	4 = Partition 4		
		4 = "On" if output should	only trigger during a closed	5 = Partition 6		
		schedule		7 = Partition 7		
		5 = "On" if output should	only trigger during an open	8 = Partition 8		
		6 = "On" if the output shou	IId be inverted			
		7 = "On" if a trigger should	be logged in event buffer			
30	7	Output 8 Schedule	••			
		1 = Schedule 1	5 = Schedule 5			
		2 = Schedule 2	6 = Schedule 6			
		3 = Schedule 3 4 = Schedule 4	7 = Schedule 7 8 = Schedule 8			
31	7	Output 8 X-10 Address				
		Segment 1 Module Numb	er	7		
		Segment 2 House Code	(See chart on page 12)	0		
32	8	Schedule 1 Opening Time	9	8 - 0		
33	8	Schedule 1 Closing Time		20 - 0		

LOC	PAGE	DESC	RIPTION	DEFAULT	DATA
34	8	Schedule 1 Days			
		1 = Sunday	5 = Thursday		
		2 = Monday	6 = Friday		
		3 = Tuesday	7 = Saturday		
35	8	4 = Wednesday	8 = Disabled on holidays	8 - 0	
36	0	Schedule 2 Opening Time	5	20 0	
27	0	Schedule 2 Closing Time		20-0	
57	0	1 - Sunday	5 - Thursday		
		7 – Sunday 2 = Monday	6 = Friday		
		3 = Tuesdav	7 = Saturday		
		4 = Wednesday	8 = Disabled on holidays		
38	8	Schedule 3 Opening Time	9	8 - 0	
39	8	Schedule 3 Closing Time		20 - 0	
40	8	Schedule 3 Days			
		1 = Sunday	5 = Thursday		
		2 = Monday	6 = Friday		
		3 = Tuesday	7 = Saturday		
44	0	4 = Wednesday	8 = Disabled on holidays		
41	8	Schedule 4 Opening Time	3	8-0	
42	8	Schedule 4 Closing Time		20 - 0	
43	8	Schedule 4 Days (Circle	the numbers to program)		
		1 = Sunday	5 = Thursday 6 = Friday		
		2 = Monuay 3 = Tuesday	7 = Saturday		
		4 = Wednesdav	8 = Disabled on holidays		
44	8	Schedule 5 Opening Time	e	8 - 0	<u> </u>
45	8	Schedule 5 Closing Time		20 - 0	
46	8	Schedule 5 Days			
		1 = Sunday	5 = Thursday		
		2 = Monday	6 = Friday		
		3 = Tuesday	7 = Saturday		
17	0	4 = Wednesday	8 = Disabled on holidays	<u>ه م</u>	
47	0	Schedule & Opening Time	5	8-0	
40	0	Schedule 6 Closing Time		20 - 0	
49	0	1 - Sunday	5 - Thursday		
		1 – Sunday 2 = Monday	5 = Thursday 6 = Eriday		
		3 = Tuesdav	7 = Saturday		
		4 = Wednesday	8 = Disabled on holidays		
50	8	Schedule 7 Opening Time	9	8 - 0	
51	8	Schedule 7 Closing Time		20 - 0	
52	8	Schedule 7 Days			
		1 = Sunday	5 = Thursday		
		2 = Monday	6 = Friday		
		3 = Tuesday	7 = Saturday		
		4 = Wednesday	8 = Disabled on holidays		

LOC	PAGE	DESC	RIPTION	DEFAULT	DATA
53	8	Schedule 8 Opening Time	e	8 - 0	
54	8	Schedule 8 Closing Time		20 - 0	
55	8	Schedule 8 Days			
		1 = Sunday	5 = Thursday		
		2 = Monday	6 = Friday		
		3 = Tuesday	7 = Saturday		
		4 = Wednesday	8 = Disabled on holidays		
56	8	January Holidays	······································	0-0-0-0-0-0-0-0	
57	8	February Holidays		0-0-0-0-0-0-0-0	
58	8	March Holidays		0-0-0-0-0-0-0-0	
59	8	April Holidays		0-0-0-0-0-0-0-0	
60	8	May Holidays		0-0-0-0-0-0-0-0	
61	8	June Holidays		0-0-0-0-0-0-0-0	
62	8	July Holidays		0-0-0-0-0-0-0-0	
63	8	August Holidays		0-0-0-0-0-0-0-0	
64	8	September Holidays		0-0-0-0-0-0-0-0	
65	8	October Holidays		0-0-0-0-0-0-0-0	
66	8	November Holidays		0-0-0-0-0-0-0-0	
67	8	December Holidays		0-0-0-0-0-0-0-0	

LOC	PAGE					DESC F	RIPTION	1				
68	6	CODES 1-10	OUTP	UT SEL	ECTIO	N (Circl	e the nu	umbers	to progr	am)		
		User	1	2	3	4	5	6	7	8	9	10
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8
69	9	CODES 11-20	OUTP	UT SEL	ECTIO	N (Circl	e the nu	umbers	to progr	am)		
		User	11	12	13	14	15	16	17	18	19	20
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8
70	9	CODES 21-30	OUTP	UT SEL	ECTIO	N (Circle	e the nu	mbers t	o progra	am)		
		User	21	22	23	24	25	26	27	28	29	30
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8

LOC	PAGE					DESC F	RIPTION	l				
71	9	CODES 31-40	OUTF	UT SEL	ECTIO	N (Circl	e the nu	imbers i	to progr	am)		
		User	31	32	33	34	35	36	37	38	39	40
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8
72	9	CODES 41-50	OUTF	UT SEL	ECTIO	N (Circl	e the nu	Imbers	to progr	am)		
		User	41	42	43	44	45	46	47	48	49	50
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8
73	9	CODES 51-60	OUTF	UT SEL	ECTIO	N (Circl	e the nu	mbers	to progr	am)		
		User	51	52	53	54	55	56	57	58	59	60
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
74			8 NOUTE			8	8	8	8	8	8	8
74	9	CODES 61-70	<u>001</u>	OT SEL	ECTIO		e the hu	impers	to progr	am)	<u> </u>	70
		Output #1	4	02	03	04	60	00	0/	00	69	10
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #4	3	3	3	3	3	3	3	3	3	3
		Output #5	4 5	4 5	4 5	4 5	4 5	4 5	4 5	4 5	4 5	4 5
		Output #6	5	5	5	5	5	5	5	5	5	5
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8
75	10	CODES 71-80			FCTIO	N (Circl	e the nu	imhers i	to progr	am)	<u> </u>	<u> </u>
10	10	User	71	72	73	74	75	76	77	78	79	80
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8

LOC	PAGE	DESC RIPTION										
76	10	CODES 81-90 OUTPUT SELECTION (Circle the numbers to program)										
		User	81	82	83	84	85	86	87	88	89	90
		Output #1	1	1	1	1	1	1	1	1	1	1
		Output #2	2	2	2	2	2	2	2	2	2	2
		Output #3	3	3	3	3	3	3	3	3	3	3
		Output #4	4	4	4	4	4	4	4	4	4	4
		Output #5	5	5	5	5	5	5	5	5	5	5
		Output #6	6	6	6	6	6	6	6	6	6	6
		Output #7	7	7	7	7	7	7	7	7	7	7
		Output #8	8	8	8	8	8	8	8	8	8	8
77	10	CODES 91-99 OUTPUT SELECTION (Circle the numbers to program)										
		User	91	92	93	94	95	96	97	98	99	
		Output #1	1	1	1	1	1	1	1	1	1	
		Output #2	2	2	2	2	2	2	2	2	2	
		Output #3	3	3	3	3	3	3	3	3	3	
		Output #4	4	4	4	4	4	4	4	4	4	
		Output #5	5	5	5	5	5	5	5	5	5	
		Output #6	6	6	6	6	6	6	6	6	6	
		Output #7	7	7	7	7	7	7	7	7	7	
		Output #8	8	8	8	8	8	8	8	8	8	

SPECIFICATIONS

NX-507 / NX-508 DIMENSIONS	1 "Width x 6 " Length x 3 " Depth
OPERATING POWER	12 VDC, Supplied from NX-8 or NX-320
AUXILIARY POWER	Supplied by NX-8 or NX-320 Limited to 100 mA by NX-507 or NX-508
NX507 CURRENT DRAW	10 mA with no relays active 310 mA with all relays active + current draw of any device attached
NX508 CURRENT DRAW	10 mA with no outputs active 25 mA with all outputs active + current draw of any device attached
OPERATING TEMPERATURE	32 to 120 degrees F
SHIPPING WEIGHT	1 lb.

FIVE YEAR LIMITED WARRANTY

CADDX CONTROLS, INC. GUARANTEES THIS PRODUCT AGAINST DEFECTIVE PARTS AND WORKMANSHIP FOR TWENTY-FOUR (24) MONTHS FROM DATE OF MANUFACTURING. IF ANY DEFECT APPEARS DURING THE WARRANTY PERIOD, RETURN IT TO CADDX POSTAGE PREPAID. THE UNIT WILL BE REPAIRED AND RETURNED AT NO CHARGE.

FOR THE REMAINING 36 MONTHS OF WARRANTY, THE CHARGE TO REPAIR OR REPLACE THIS MODULE WILL NOT EXCEED \$10.00 PLUS SHIPPING AND HANDLING.

CADDX ASSUMES NO LIABILITY FOR CONSEQUENTIAL OR INDIRECT DAMAGE AND ACCEPTS NO RESPONSIBILITY FOR REPAIRING DAMAGE TO THE PRODUCT CAUSED BY MISUSE, CARELESS HANDLING, OR WHERE REPAIRS HAVE BEEN MADE BY OTHERS.

NO OTHER GUARANTEE, WRITTEN OR VERBAL, IS AUTHORIZED BY OR ON BEHALF OF CADDX CONTROLS, INC., GLADEWATER, TEXAS.

CADDX CONTROLS, INC. 1420 NORTH MAIN STREET GLADEWATER, TEXAS 75647 TOLL FREE 800-727-2339 FAX 903-845-6811 www.caddx.com

NX507/NX508 INSTALLATION MANUAL NX507-508ID99 REV D (02-25-99)