RANGER 9016X

INSTALLATION MANUAL

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CADDX-CADDI CONTROLS INC.

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RANGER 9016X
X-10® COMPATIBLE OUTPUT BOARD*
(*Requires X10 PRO™ PSC04 Interface Module)

General Description

The Caddx 9016X output expansion boards are versatile microcomputer controlled add on modules for the Ranger 9000/9000E control panels. The 9016X provides 16 separate open collector outputs that can be used for a variety of applications including X-10 modules, access control, home control/automation, and security functions. The 16 outputs can be separately programmed for over 200 functions including code entry, individual zone alarms or faults, and phone-faults. The outputs can be programmed to activate for an event in any or all partitions. In addition, the timing of these relays can be separately programmed for up to 30 minutes. Each output has a separate programmable "on/off" time that can be programmed to either activate the relay during the "on" time, or used in conjunction with another programming option to create time zones. The 9016X also has a built in serial interface that can be connected to a serial printer for local printouts of all communicator activity. The printouts include date/time activity and partition information. The 9016X can be easily programmed using the 8950 or the 9075 programmer.

4-Position Dip Switch Settings

Each expansion device (zone expander, auxiliary output board, etc.) connected to the 9000E must report a unique number to the control via the 4-wire buss. (See Location 377 in 9000E Installation Manual.) Positions 1, 2, and 3 of this 4 position dip switch located in the center of the 9016X are used to assign this number. Use the following chart to select the appropriate dip switch setting for the 9016X. For example if the 9016X is the only expansion device being used, dip switch 1, 2, and 3 should be "OFF". If the 9016X is the third expansion board on the buss then switch 1 would be off, switch 2 would be on , and switch 3 would be off. There should never be a number skipped when programming these switches.

Device Number	Position #1	Position #2	Position #3
1	OFF	OFF	OFF
2	ON	OFF	OFF
3	OFF	ON	OFF
4	ON	ON	OFF
5	OFF	OFF	ON
6	ON	OFF	ON
7	OFF	ON	ON

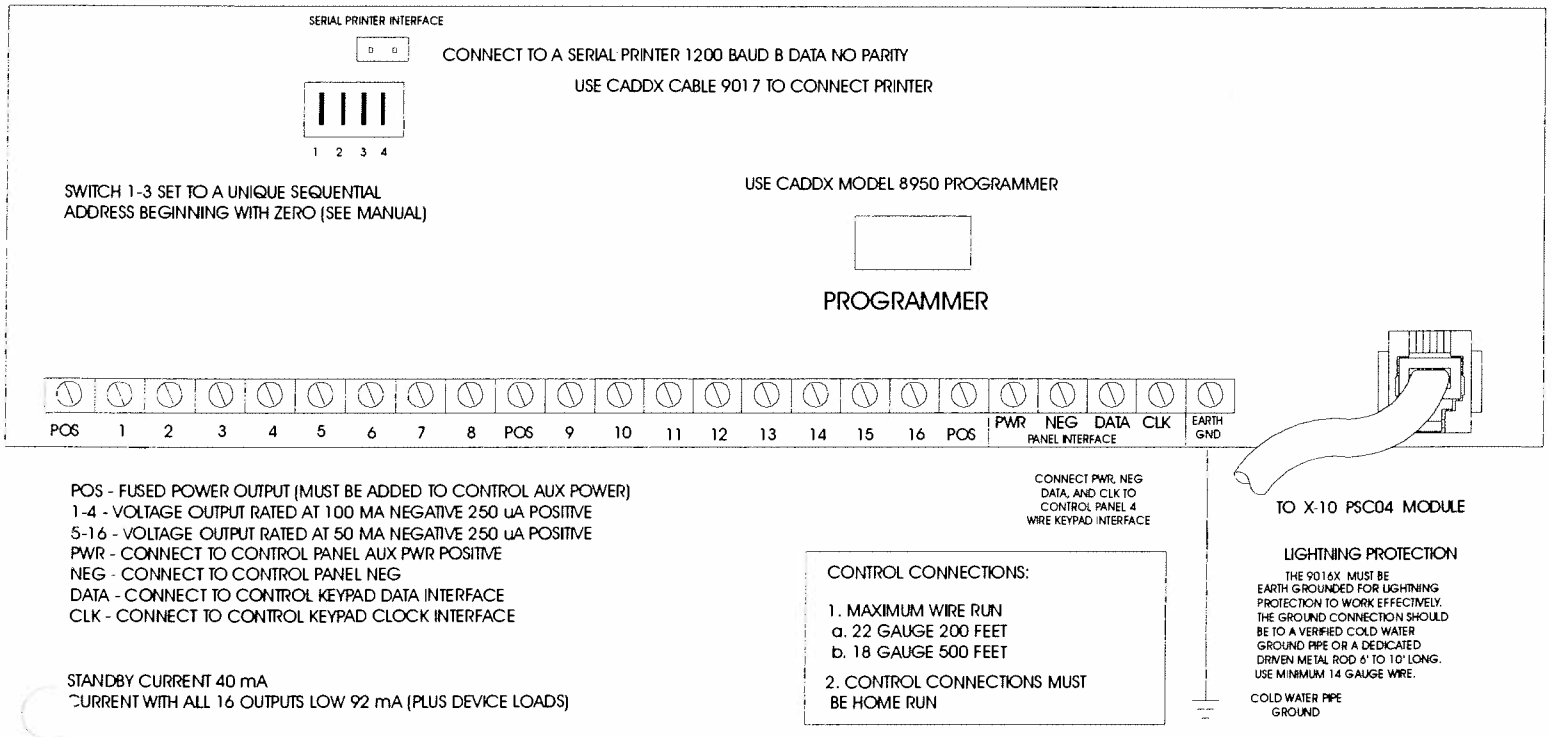
Using the Serial Printer Interface

The 9016X is equipped with a Serial printer interface. It runs at 1200 Baud 8 data bits no parity. The serial interface is a 2 position pin connector with the pins labeled SD (Serial Data) and SIG GND (Signal Ground). Connect the pin labeled SD to the receive data pin of the serial printer (usually pin 3). Connect the pin labeled SIG GND to the signal ground pin of the serial printer (usually pin 7). The printer will print the date/time and partition of all events that the communicator is capable of reporting. For ease of installation, use the 9017 Printer Interface Cable equipped with RS-232 interface.

9016X TERMINAL DESCRIPTION

TERMINAL	DESCRIPTION
POS	Auxiliary output positive.
1	Output 1 rated 100 mA when negative.
2	Output 2 rated 100 mA when negative.
3	Output 3 rated 100 mA when negative.
4	Output 4 rated 100 mA when negative.
5-16	Output 5-16 rated 50 mA when negative.
POS	Auxiliary output positive.
PWR	12 VDC power input rated 40 mA plus current of devices connected to 1-16 (must be home run to control).
GND	Auxiliary power negative (must be home run to control panel).
DATA	Keypad buss data terminal (must be home run to control panel).
CLK	Keypad buss clock terminal (must be home run to control panel).
EGND	Earth ground.

9016X TERMINAL DRAWING



PROGRAMMING THE OUTPUTS

Locations 000 thru 255 contain the programming data for the characteristics of the outputs. Each output has sixteen possible programming locations. The following sixteen locations describe the programming for output #1. The remaining outputs can be addressed by referring to the programming worksheets in the back of this manual.

Locations 000-003: Programming the Output 1 Options

Locations 000 through 003 control the output options for output number 1. The following descriptions of these data locations will help you to understand how to program each of these locations.

Location 1 (Source) - The number programmed in the **Data 1** location is used to direct the control as to which partition(s) will be the partition or partitions to initiate the output activation. When partitions are being used, programming selections are as follows:

DATA	PARTITIONS ENABLED
"1"	Partition 1
"2"	Partition 2
"3"	Partition 1 or 2
"4"	Partition 3
"5"	Partition 1 or 3
"6"	Partition 2 or 3
"7"	Partition 1, 2, or 3
"8"	Partition 4
"9"	Partition 1 or 4
"10"	Partition 2 or 4
"11"	Partition 1, 2, or 4
"12"	Partition 3 or 4
"13"	Partition 1, 3, or 4
"14"	Partition 2, 3, or 4
"15"	Partition 1, 2, 3, or 4

Location 2 (Duration) - The number programmed in the **Data 2** location represents the amount of time that an output will remain activated. This time is selectable in 2 second increments, from 2 to 30 seconds. For example, programming a "5" in the data 2 location will create a voltage trigger that would last for 10 seconds (2 x "5" = 10 seconds). Programming a "0" will cause the output to follow the condition. Programming selections for this location are the numbers "0" through "15". NOTE: If you want to change the increments from seconds to minutes, follow the programming instructions for location 004 to do so, and the time will be selectable from 2 to 30 minutes.

Location 3 (Category) - The number programmed in the **Data 3** location will determine the category from which you will select an activation event. Refer to the following table below to select which category number to program in this location. Programming selections for this location are "0" through "15".

Location 4 (Event) - The number programmed in the **Data 4** location will determine the actual event in which you wish to have the trigger activate upon. Refer to the table below to select which event number to program in this location. Programming selections for this location are "0" through "15"

DATA 3 CATEGORY	DATA 4 EVENT	DESCRIPTION OF EVENT
"0"	"0-15"	"OPEN" on individual zones 1 through 16.
"1"	"0-15"	"OPEN" on individual zones 17 through 32.
"2"	"0-15"	"SHORT" on individual zones 1 through 16.
"3"	"0-15"	"SHORT" on individual zones 17 through 32.
"4"	"0-15"	"OPEN or SHORT" on individual zones 1 through 16.
"5"	"0-15"	"OPEN or SHORT" on individual zones 17 through 32.
"6"	"0-15"	"BYPASS REPORT" of individual zones 1 through 16.
"7"	"0-15"	"BYPASS REPORT" of individual zones 17 through 32.
"8"	"0-15"	"TROUBLE REPORT" on individual zones 1 through 16.
"9"	"0-15"	"TROUBLE REPORT" on individual zones 17 through 32.
"10"	"0-15"	"ALARM" on individual zones 1 through 16.
"11"	"0-15"	"ALARM" on individual zones 17 through 32.
"12"	"0"	Any "FIRE ALARM".
	"1"	Any "PANIC ALARM".
	"2"	Any "BURGLARY ALARM".
	"3"	Any "TROUBLE REPORT".
	"4"	Any "BYPASS REPORT".
	"5"	Any "EARLY TO OPEN REPORT".
	"6"	Any "LATE TO CLOSE REPORT".
	"7"	"AC FAILURE REPORT"
	"8"	"DURESS"
	"9"	"AUXILIARY 1"
	"10"	"AUXILIARY 2"
	"11"	"KEYPAD PANIC" (double keypress [✱] and [#])
	"12"	"KEYPAD TAMPER"
	"13"	"AUTO TEST"
	"14"	RESERVED
	"15"	"CANCEL"

DATA 3 CATEGORY	DATA 4 EVENT	DESCRIPTION OF EVENT
"13"	"0"	Activation of "INSTANT (PARTIAL) LED"
	"1"	Activation of "ARMED LED"
	"2"	"READY LED"
	"3"	"AC LED"
	"4"	"ENTRY DELAY"
	"5"	"FIRE LED"
	"6"	"TROUBLE LED"
	"7"	"ALARM MEMORY"
	"8"	"LOW BATTERY"
	"9"	"PULSING SOUNDER"
	"10"	Activation of the "STEADY SIREN"
	"11"	Activation of the "YELPING SIREN"
	"12"	Activation of "ANY SIREN"
	"13"	"DISARMED STATE"
	"14"	"NOT READY STATE"
	"15"	RESERVED
"14"	"0-15"	"VALID CODE ENTRY, USERS 1 THROUGH 16"
"15"	"0"	RESERVED
	"1"	RESERVED
	"2"	RESERVED
	"3"	RESERVED
	"4"	"RESETTABLE AUXILIARY/SMOKE DETECTOR POWER"
	"5"	"DYNAMIC BATTERY TEST"
	"6"	"LINE SEIZURE"
	"7"	"OPEN ON ANY ZONE"
	"8"	"SHORT ON ANY ZONE"
	"9"	"OPEN OR SHORT ON ANY ZONE"
	"10"	"AFTER OPEN TIME BEFORE CLOSING TIME"
	"11"	"AFTER CLOSING TIME BEFORE OPENING TIME"
	"12"	"DOWNLOAD COMPLETE"
	"13"	"FAILED TO COMMUNICATE"
	"14"	"PHONE LINE TROUBLE"
	"15"	RESERVED

Location 004: Special Timing For Output 1 Operation

Programming a "1" in location 004 will cause Output #1 to activate in two minute increments from 2 to 30 minutes. Programming a "2" in location 004 will cause this output to latch until a valid code is entered. Programming a "4" in Location 4 will cause the output to activate for the programmed time or until a code is entered (whichever comes first). Programming an 8 will cause this output to activate an X-10 relay.

Location 005: Special Conditions For Output 1 Operation

At factory default (0), all outputs are 12 volts and will switch to "0" volts on activation for a negative trigger. See examples on page 12.

VALUE	SPECIAL CONDITION
1	POSITIVE TRIGGER ("0" VOLTS SWITCHING TO 12 VOLTS ON ACTIVATION)
2	ENABLED ONLY DURING OPEN TIME
4	ENABLED ONLY DURING CLOSED TIME
8	OUTPUT WILL PULSE (X-10 RELAYS WILL NOT PULSE)

Location 006: Reserved

Location 007: Holiday Selector

Programming an "8" in location 007 will not allow opening activation on Holidays programmed in Locations 256-319. Programming a "9" will allow activation on holidays. **(Note: This Location must contain an "8" or "9".)**

Locations 008 - 014: Opening/Closing Schedule for Sunday through Saturday

Location 008 - 014 is used to select the opening and closing times for output number 1 for Sunday through Saturday. There are 7 schedules beginning in location 320.

Location 015: Reserved

Locations 016-255: Refer To Programming Worksheet

PROGRAMMING HOLIDAY SCHEDULES

Locations 256 thru 319 contain the dates of up to 16 holidays. These holidays can be used to disable the activation of an output on any day of the year. Months and days less than 10 must be entered with leading zeros (ie 0101 for January 1st). Location 256 contains the "ten's digit" of the month, and Location 257 contains the "ones digit" of the month. Location 258 contains the "ten's digit" of the date, and Location 259 contains the "ones digit" of the date. (see the Programming Worksheet for the locations of the remaining holidays).

Locations 320-323: Programming Schedule 1 Opening Time

When using Schedule 1 these locations determine the time of day for Opening. Time is entered in 24 hour time beginning with location 320. For example, to enter an opening time of 9:15 am (09:15), program a "0" in location 320, a "9" in location 321, a "1" in location 322, and a "5" in location 323. Factory default is "0-6-0-0" or 6:00 am.

Locations 324-327: Programming Schedule 1 Closing Time

When using Schedule 1 these locations determine the time of day for Closing. Time is entered in 24 hour time beginning with location 324. For example, to enter a closing time of 9:15 pm (21:15), program a "2" in location 324, a "1" in location 325, a "1" in location 326, and a "5" in location 327. Factory default is "2-0-0-0" or 8:00 pm.

Locations 328 - 375: Schedules 2-7

(See examples for Schedule 1, above)

Locations 376: Programming House Codes

Location 376 is used to select House Codes for the PSC04 X-10 interface. Program a "0" for House Code A to "15"(F) for House Code P.

Locations 377-379: Reserved

Locations 380-395: Programming Output Addresses

Location 380-395 are used to assign outputs 1-16 to a specific X-10 unit. For output 1-16 X-10 addresses, program a "0" for address 1 to "15"(F) for address 16.

See page 12 and 13 for possible output applications and examples.

PROGRAMMING WORKSHEETS

LOCATION	PAGE	DESCRIPTION	DATA 1	DATA 2	DATA 3	DATA 4	"DEFAULT"
000-003	4	OUTPUT 1 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 0"
004	7	OUTPUT 1 SPECIAL TIMING					"0"
005	7	OUTPUT 1 SPECIAL CONDITIONS					"0"
006	7	RESERVED					RESERVED
007	7	HOLIDAY ENABLE					"8"
008-011	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
012-015	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
016-019	7	OUTPUT 2 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 1"
020	7	OUTPUT 2 SPECIAL TIMING					"0"
021	7	OUTPUT 2 SPECIAL CONDITIONS					"0"
022	7	RESERVED					RESERVED
023	7	HOLIDAY ENABLE					"8"
024-027	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
028-031	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
032-035	7	OUTPUT 3 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 2"
036	7	OUTPUT 3 SPECIAL TIMING					"0"
037	7	OUTPUT 3 SPECIAL CONDITIONS					"0"
038	7	RESERVED					RESERVED
039	7	HOLIDAY ENABLE					"8"
040-043	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
044-047	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"

LOCATION	PAGE	DESCRIPTION	DATA 1	DATA 2	DATA 3	DATA 4	"DEFAULT"
048-051	7	OUTPUT 4 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 3"
052	7	OUTPUT 4 SPECIAL TIMING					"0"
053	7	OUTPUT 4 SPECIAL CONDITIONS					"0"
054	7	RESERVED					RESERVED
055	7	HOLIDAY ENABLE					"8"
056-059	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
060-063	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
064-067	7	OUTPUT 5 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 4"
068	7	OUTPUT 5 SPECIAL TIMING					"0"
069	7	OUTPUT 5 SPECIAL CONDITIONS					"0"
070	7	RESERVED					RESERVED
071	7	HOLIDAY ENABLE					"8"
072-075	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
076-079	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
080-083	7	OUTPUT 6 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 5"
084	7	OUTPUT 6 SPECIAL TIMING					"0"
085	7	OUTPUT 6 SPECIAL CONDITIONS					"0"
086	7	RESERVED					RESERVED
087	7	HOLIDAY ENABLE					"8"
088-091	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
092-095	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
096-099	7	OUTPUT 7 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 6"
100	7	OUTPUT 7 SPECIAL TIMING					"0"
101	7	OUTPUT 7 SPECIAL CONDITIONS					"0"
102	7	RESERVED					RESERVED
103	7	HOLIDAY ENABLE					"8"
104-107	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
108-111	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
112-115	7	OUTPUT 8 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 7"
116	7	OUTPUT 8 SPECIAL TIMING					"0"
117	7	OUTPUT 8 SPECIAL CONDITIONS					"0"
118	7	RESERVED					RESERVED
119	7	HOLIDAY ENABLE					"8"
120-123	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
124-127	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
128-131	7	OUTPUT 9 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 8"
132	7	OUTPUT 9 SPECIAL TIMING					"0"
133	7	OUTPUT 9 SPECIAL CONDITIONS					"0"
134	7	RESERVED					RESERVED
135	7	HOLIDAY ENABLE					"8"
136-139	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
140-143	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
144-147	7	OUTPUT 10 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 9"
148	7	OUTPUT 10 SPECIAL TIMING					"0"
149	7	OUTPUT 10 SPECIAL CONDITIONS					"0"
150	7	RESERVED					RESERVED
151	7	HOLIDAY ENABLE					"8"
152-155	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
156-159	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"

LOCATION	PAGE	DESCRIPTION	DATA 1	DATA 2	DATA 3	DATA 4	"DEFAULT"
160-163	7	OUTPUT 11 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 10"
164	7	OUTPUT 11 SPECIAL TIMING					"0"
165	7	OUTPUT 11 SPECIAL CONDITIONS					"0"
166	7	RESERVED					RESERVED
167	7	HOLIDAY ENABLE					"8"
168-171	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
172-175	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
176-179	7	OUTPUT 12 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 11"
180	7	OUTPUT 12 SPECIAL TIMING					"0"
181	7	OUTPUT 12 SPECIAL CONDITIONS					"0"
182	7	RESERVED					RESERVED
183	7	HOLIDAY ENABLE					"8"
184-187	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
188-191	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
192-195	7	OUTPUT 13 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 12"
196	7	OUTPUT 13 SPECIAL TIMING					"0"
197	7	OUTPUT 13 SPECIAL CONDITIONS					"0"
198	7	RESERVED					RESERVED
199	7	HOLIDAY ENABLE					"8"
200-203	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
204-207	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
208-211	7	OUTPUT 14 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 13"
212	7	OUTPUT 14 SPECIAL TIMING					"0"
213	7	OUTPUT 14 SPECIAL CONDITIONS					"0"
214	7	RESERVED					RESERVED
215	7	HOLIDAY ENABLE					"8"
216-219	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
220-223	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
224-227	7	OUTPUT 15 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 14"
228	7	OUTPUT 15 SPECIAL TIMING					"0"
229	7	OUTPUT 15 SPECIAL CONDITIONS					"0"
230	7	RESERVED					RESERVED
231	7	HOLIDAY ENABLE					"8"
232-235	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
236-239	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"
240-243	7	OUTPUT 16 SOURCE/TIME/CATEGORY/EVENT					"15 - 5 - 10 - 15"
244	7	OUTPUT 16 SPECIAL TIMING					"0"
245	7	OUTPUT 16 SPECIAL CONDITIONS					"0"
246	7	RESERVED					RESERVED
247	7	HOLIDAY ENABLE					"8"
248-251	7	SUNDAY, MONDAY, TUESDAY, WEDNESDAY					"1 - 2 - 3 - 4"
252-255	7	THURSDAY, FRIDAY, SATURDAY, RESERVED					"5 - 6 - 7 - 0"

LOCATION	PAGE	DESCRIPTION	DATA 1	DATA 2	DATA 3	DATA 4	"DEFAULT"
256-259	7	HOLIDAY 1					"15 - 15 - 15 - 15"
260-263	7	HOLIDAY 2					"15 - 15 - 15 - 15"
264-267	7	HOLIDAY 3					"15 - 15 - 15 - 15"
268-271	7	HOLIDAY 4					"15 - 15 - 15 - 15"
272-275	7	HOLIDAY 5					"15 - 15 - 15 - 15"
276-279	7	HOLIDAY 6					"15 - 15 - 15 - 15"
280-283	7	HOLIDAY 7					"15 - 15 - 15 - 15"
284-287	7	HOLIDAY 8					"15 - 15 - 15 - 15"
288-291	7	HOLIDAY 9					"15 - 15 - 15 - 15"
292-295	7	HOLIDAY 10					"15 - 15 - 15 - 15"
296-299	7	HOLIDAY 11					"15 - 15 - 15 - 15"
300-303	7	HOLIDAY 12					"15 - 15 - 15 - 15"
304-307	7	HOLIDAY 13					"15 - 15 - 15 - 15"
308-311	7	HOLIDAY 14					"15 - 15 - 15 - 15"
312-315	7	HOLIDAY 15					"15 - 15 - 15 - 15"
316-319	7	HOLIDAY 16					"15 - 15 - 15 - 15"
320-323	7	SCHEDULE 1 OPENING TIME					"0 - 6 - 0 - 0"
324-327	8	SCHEDULE 1 CLOSING TIME					"2 - 0 - 0 - 0"
328-331	8	SCHEDULE 2 OPENING TIME					"0 - 6 - 0 - 0"
332-335	8	SCHEDULE 2 CLOSING TIME					"2 - 0 - 0 - 0"
336-339	8	SCHEDULE 3 OPENING TIME					"0 - 6 - 0 - 0"
340-343	8	SCHEDULE 3 CLOSING TIME					"2 - 0 - 0 - 0"
344-347	8	SCHEDULE 4 OPENING TIME					"0 - 6 - 0 - 0"
348-351	8	SCHEDULE 4 CLOSING TIME					"2 - 0 - 0 - 0"
352-355	8	SCHEDULE 5 OPENING TIME					"0 - 6 - 0 - 0"
356-359	8	SCHEDULE 5 CLOSING TIME					"2 - 0 - 0 - 0"
360-363	8	SCHEDULE 6 OPENING TIME					"0 - 6 - 0 - 0"
364-367	8	SCHEDULE 6 CLOSING TIME					"2 - 0 - 0 - 0"
368-371	8	SCHEDULE 7 OPENING TIME					"0 - 6 - 0 - 0"
372-375	8	SCHEDULE 7 CLOSING TIME					"2 - 0 - 0 - 0"
376	8	X-10 HOUSE CODE (0-15)					"0"
377-379	8	RESERVED					RESERVED
380	8	OUTPUT 1 X-10 ADDRESS					"0"
381	8	OUTPUT 2 X-10 ADDRESS					"1"
382	8	OUTPUT 3 X-10 ADDRESS					"2"
383	8	OUTPUT 4 X-10 ADDRESS					"3"
384	8	OUTPUT 5 X-10 ADDRESS					"4"
385	8	OUTPUT 6 X-10 ADDRESS					"5"
386	8	OUTPUT 7 X-10 ADDRESS					"6"
387	8	OUTPUT 8 X-10 ADDRESS					"7"
388	8	OUTPUT 9 X-10 ADDRESS					"8"
389	8	OUTPUT 10 X-10 ADDRESS					"9"
390	8	OUTPUT 11 X-10 ADDRESS					"10"
391	8	OUTPUT 12 X-10 ADDRESS					"11"
392	8	OUTPUT 13 X-10 ADDRESS					"12"
393	8	OUTPUT 14 X-10 ADDRESS					"13"
394	8	OUTPUT 15 X-10 ADDRESS					"14"
395	8	OUTPUT 16 X-10 ADDRESS					"15"

POSSIBLE OUTPUT APPLICATION EXAMPLES

Possible application for outputs:

Example #1	Turn on entryway light upon entry.
Example #2	Have #1 work only during night time.
Example #3	Turn on or off a device during business hours.
Example #4	Arm or disarm the system.

Examples for Outputs:

Example #1 To have Output #1 trip and activate an X-10 module with Housecode C and Unit Code 4 for 6 minutes when Zone 1 is opened, program the following:

LOCATIONS	PROGRAM (EXAMPLES)			
000 - 003	15	3	0	0
004	9			
376	2			
380	3			

Example #2 In the above example to only allow the output to activate from 5:00 p.m. to 9:00 a.m. also program the following:

LOCATIONS	PROGRAM (EXAMPLES)			
005	4			
008 - 011	1	1	1	1
012 - 015	1	1	1	0
320 - 323	0	9	0	0
324 - 327	1	7	0	0

EXAMPLES CONTINUED:

Example #3 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 and not at all Saturday and Sunday, program the following:

LOCATIONS
064 - 067
068
072 - 075
076 - 079
320 - 323
324 - 327
328 - 331
332 - 335
376
384

PROGRAM (EXAMPLES)			
15	0	15	10
8			
1	2	2	2
2	2	1	0
0	6	0	0
0	6	0	0
0	9	0	0
1	7	0	0
15			
7			

The output will not activate on Saturday & Sunday because schedule 1 has the opening & closing times the same.

Example #4 To have output 3 trip for 2 seconds at 7:00 a.m. Monday through Friday, 9:00 a.m. Saturday, but not at all Sunday, program the following

LOCATIONS
032 - 035
040 - 043
044 - 047
320 - 323
324 - 327
328 - 331
332 - 335
336 - 339
340 - 343

PROGRAM (EXAMPLES)			
15	1	15	10
1	2	2	2
2	2	3	0
0	6	0	0
0	6	0	0
0	7	0	0
2	0	0	0
0	9	0	0
2	0	0	0

WARRANTY STATEMENT

CADDX-CADDI 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.

FOR THE REMAINING 36 MONTHS OF WARRANTY, THE UNIT WILL BE REPAIRED FOR A FEE NOT TO 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-CADDI CONTROLS, INC., GLADEWATER, TEXAS

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