SCOPE

A. PRINTS - Locate equipment as shown on print provided by SWD.
B. TAMPRUF SCREWS - All magnetic contacts MUST be installed using TamPruf screws.
C. PIR TAMPERS - Connect all PIR tampers to input loop wiring. Refer to detail drawings for hookup.
D. DEVIATIONS - There are to be no changes to the package indicated on the store prints provided by SWD without authorization from Pat Molli or Marilyn Dinsmoor of SWD Headquarters at the above noted number. Under NO CIRCUMSTANCES can the Kmart Manager dictate changes to the system. Document all authorized changes on installation order.
E. EXPOSED WIRING - As in all SW installations there must be no exposed wiring in finished areas.
F. FIRE PANEL MONITORING - An output will be provided from the existing fire panel, provided by others, to be connected to zone 1 of the SWD communicator. NOTE: The only times this will not apply is when local code requires direct connect to local monitoring or dual phone line monitoring.
G. ELECTRICAL CONTRACTOR to provide the following:
   1. Back boxes for IR's and zone bells with conduit stubbed into the ceiling.
   2. Conduit from money room safe to stock room mezzanine.
   3. Electrical duplex outlet for safe alarm in stock room mezzanine next to conduit provided from money room safe.
   4. Conduit stubbed for receiving door contacts.
H. Pharmacy area will receive it's own keypad for separate arming and disarming from main store. This requires additional setup of the Controlplex which are described herein.

MOUNTING LOCATIONS (DO NOT APPLY POWER AT THIS TIME)

** = ACTUAL NUMBER WILL VARY BY STORE - REFER TO INSTALLATION ORDER*

A. 1 - BAA1600 - CONTROLPLEX PACKAGE BY SWD., w/cabinet, printer, and power strip, at service desk, close to dedicated outlets and conduit provided for security panel. Some stores may use power poles instead of under floor conduit. Verify exact location with Kmart Construction Representative.
B. 1 - 3220 - KEYPAD BY SWD, for Pharmacy. Locate outside pharmacy area next to entry/exit door of pharmacy. To allow arming/disarming of pharmacy area.
C. * - 1020 - DUAL INPUT LEM BY SWD., as noted on store print (See section E). Each LEM is used for 2 zones. Each LEM must be addressed (1-50). Each LEM provides 2 zones. LEM 1 provides zones 1 and 2, LEM 2 provides zones 3 and 4, and so on. The LEM address is set using the 8 position DIP switch on the P.C. board. Refer to the Input LEM address sheet for switch settings. See details provided.
D. * - 1101 - OUTPUT C-LEM BY SWD., as noted on store print (See the section "OUTPUTS"). Each output LEM provides 1 output. Output numbers are noted on the store print. The output Lems must also be addressed and an "Output LEM" address sheet has been provided to set the address switches for the number desired. See details for connections. Output 2 is the night time main store output. Use two C-LEM's programmed as the same number (output 2) and use one for night main store bell activation and the other for communicator trip on main store alarm. Output 4 can be used to indicate pharmacy armed. Output 5 to be used for communicator trip on a pharmacy alarm. If necessary, more than one output LEM can be addressed to same output number. Zones requiring day outputs (i.e. fire exits, receiving) must be zoned from 11 to 50.
E. 1 - D8112FA - 8 ZONE CONTROL BY RADIONICS, in electrical / telephone equipment room located in rear of store. Use one of the batteries which comes with the CH12C power supply for backup (see items J & K). This is being used as a slave communicator only. Two output LEM's will be located in the enclosure to trip the communicator. One will be used activate during a main store alarm and the other to be used to activate during a pharmacy alarm. The enclosure must be tampered and will be connected to an

input LEM as shown on the store print. Fire panel must be connected to zone one. Fire panel to be provided by others. The RJ31X jack must also be tampered. This can be done by placing a jumper from 2 to 7 in the RJ31X jack and then taking the Orange and Blue wires at the Communicator and connecting them in series with the enclosure tamper. DO NOT PLACE ANY IDENTIFICATION ON THE OUTSIDE OF THE COMMUNICATOR ENCLOSURE WHICH IDENTIFIES SILENT WATCHMAN OR WHAT IS INSIDE THE ENCLOSURE.

F. 1 - D8109 - ENCLOSURE FOR D8112FA BY RADIONICS, locate with D8112FA in electrical / telephone equipment room.
G. 1 - D110 - TAMPER SWITCH BY RADIONICS, locate inside D8109 enclosure.
H. 4 - D8103 - ENCLOSURE BY RADIONICS, locate as necessary to house input and output LEMs for given areas (generally in each corner of building). Exact location to be determined by installer.
I. 2 - ABB1021 - ENCLOSED BELL BY AMSECO, one to be located on inside of store at the front; one to be located on outside of store in front (Back to back at same location. There will be conduit stubbed through the front wall for the outside bell - look for it. Refer to store print for general location. The tamper switches on the bell enclosures will be connected to an input LEM as noted on store print.
J. 2 - CH12C - POWER PACK BY MOOSE, one inside the inside bell enclosure for bell output power (see details). Utilize the PS1219 battery with power pack to allow placement of unit inside the inside bell enclosure. Use battery which came with the unit for the 3001-001 panel in telephone equipment room. One inside the BAA1600 enclosure to power devices and zone bells.
K. 1 - PS1219 - BATTERY BY POWERSONIC, locate with CH12C inside bell enclosure
L. 1 - PROX II - PROX WATCH BY GTE, in money room to protect main safe. Output of Prox Watch to be connected to an input LEM.
M. 1 - MSS-100-17 - SAFE CONTACT BY EPC, on main safe, wired to Prox Watch.
N. * - 5705 - SHATTERBOX BY SENTROL, to protect front glass entry, Garden Shop glass entry, and glass doors leading from garden shop to main store. Follow manufacturers mounting instructions, mounted 10' from glass.
O. 1 - 5709 - SHATTERBOX TESTER BY SENTROL, leave with store manager for testing glass break detectors.
P. * - 2505A - WIDE GAP CONTACTS BY SENTROL, for all external doors and hatches except for all glass entry doors.
Q. * - 1078CW - RECESSED CONTACTS BY SENTROL, for all glass entry doors and glass doors leading to outside garden shop.
R. * - DS702 - DUAL TECH SPACE DETECTOR BY DETECTION SYS., for receiving area, garden shop, and to cover the overhead doors of the Building material and Automatic service bay areas, as shown on store print.
S. * - DS774-IG - WALL MOUNT PASSIVE IR BY DETECTION SYS., to cover rear isle as shown on print.
T. * - OMLR - LONG RANGE LENS BY DETECTION SYS., for the DS774-IG Passive IR as noted on SWD print for long range.
U. * - DS918 - CEILING MOUNT IR/WIDE RANGE BY DETECTION SYS., as shown on print.
V. * - DS928 - CEILING MOUNT IR/LONG RANGE BY DETECTION SYS., as shown on print.
W. * - 5306PV-12 - BELL BY AMSECO, for zone annunciation of fire exits, overhead doors, compactors and roof hatches, as shown on print.
X. * - Common 1 amp diode - Purchase locally, suggested for use as a "kick-back device" for bells. One per bell.

POWER UP

A. Meter all field wiring for grounds, opens and AC inductance prior to connecting field wiring to LEMs or console.
B. Ensure that all input and output LEMs: have the covers on correctly; are connected to the data line correctly; and the data line is correctly connected to the Controlplex.
C. Ensure that all zone inputs have the End-Of-Line resistors installed as shown in details. Any zones not being used can have the resistor left off

so at the time of initialization, these zones will not be counted.

D. Apply power to the Controlplex, AC first and then battery.
E. Perform start up routine answering all questions as prompted.
F. If asked "INITIALIZE LEM LINE?". Press <Yes>
G. Unit will display "ON LINE XX--YY?". The "XX" indicates the how many zones were connected to the unit the last time the unit was operational, the "YY" indicates how many zones are correctly connected to the unit now. Ensure the "YY" corresponds to the number of zones that are installed. If the number is wrong, proceed with the start-up procedures and run an on-line report to determine which LEMs are On-line and which are not. Service the LEMs which are not On-line. NOTE: Internal tamper switch of Input LEM must be depressed by the cover or the second zone of the LEM will never come up "ON-LINE". To proceed press <Yes>. Panel will then display "BUSY-RESCHEDULING" for a few seconds and then continue on.
H. Unit will display the start up message (flashing) and also any alarm messages (flashing). Press <1>,<8>,<0>, <Enter>. This is the highest priority access code.
I. Unit will now display the messages, one at a time followed by a "?". The unit is asking you "do you wish to accept these alarms?". Press <Yes> for each alarm message displayed.
J. Unit will display the date and time and/or any open zones.
K. If there are any zone bells sounding, press <1>,<8>, <Disarm>, <Enter>.
L. Unit will now momentarily display "DAY MODE" and then go back to the date and time. If this did not stop the bells then proceed to check the bell wiring and output LEM address setting.
M. Set the Controlplex to the correct time by pressing <1>,<8>,<SHIFT>,<T>. The unit will display the date and time as "MM/DD/YY HH/MM/SS" with a flashing cursor at the far left side. The cursor indicates which digit to be changed. All entries are two digits so if the entry has only 1 digit then a 0 must proceed the actual entry (example: 1/1/89 would be 01/01/89). After an entry has been made the cursor will automatically move to the next position to the right. If a digit does not need to be changed, the Yes key may be used to move the cursor to the right. In addition the back-space key may be used to move the cursor to the left. After display is correct, press <Enter>, the unit will display "ENTER DAY NO.". Enter the correct day number (Sunday = 1, Monday = 2, through Saturday = 7) followed by <Enter>.
N. The Controlplex must be programmed that system has a pharmacy section. Press <1>,<7>,<SHIFT>,<L>. Unit will display "NUMBER OF AREAS? 1". Press the number <2> (for 2 areas) followed by <ENTER>. Main store will be area 1 and pharmacy will be area 2. To arm/disarm main store enter a valid usercode followed by either <ARM> or <DISARM>. To arm/disarm pharmacy enter a valid usercode followed by <2>. Arming and disarming is done in exactly the same manner.

ZONE TYPES PROGRAMMING

A. FIRE, this zone type is for connecting to the fire panel.
B. STORE, these are the standard protection zones which are shunted during the day mode but armed during the maintenance and night modes.
C. MAINT, (Maintenance), these are shunted during the day and maintenance modes, and armed during the night mode.
D. ACCESS, these are for the entry/exit path, they also are shunted during the day and maintenance modes, and armed during the night mode.
E. EXIT, actual entry/exit door.
F. FIRE-X, these are for fire exits (including roof hatch) which may or may not have a zone bell. Zones of this type must be zoned between 11 and 50 for proper zone bell operation.
G. SAFE, this is for the money room safe.

H. RECVNG, these are for all receiving doors including the trash door. Zones of this type must be zoned between 11 and 50 for proper zone bell operation.
I. TAMPER, these are for all tamper zones.
J. SOAK, this is only used under advice of Technical Services.
K. PHRMCY, for pharmacy instant zones.
L. PHMSPA, for pharmacy motion (space) detectors (entry/exit follower).
M. PHMEXT, for pharmacy entry/exit door.
N. AREA-3, not used for Kmart system.
O. AREA-4, not used for Kmart system.

VARIABLES PROGRAMMING

A. STORE EXT TIME 30 - (seconds) - This is the amount of time one is allowed to exit the premises via the ACCESS and EXIT zones from the moment the system is set to FULLY ARMED. Do not use 0.
B. ACCESS LIMIT 99 - This is the highest zone number that can be inhibited.
C. ZONE 11 TO? 12 - To have multiple inputs, starting with zone 11 to trip output 11. Default is 12. Zones up to but not including the variable will trip output 11. Example: 12 = only zone 11 trips 11, 15 = zones 11-14 will trip 11.
D. ZONE 17 TO? 18 - To have multiple inputs, starting with zone 17 to trip output 17. Default is 18. Zones up to but not including the variable will trip output 17. Example: 18 = only zone 17 trips 17, 20 = zones 17-19 will trip 17.
E. ZONE 23 TO? 24 - To have multiple inputs, starting with zone 23 to trip output 23. Default is 24. Zones up to but not including the variable will trip output 23. Example: 24 = only zone 23 trips 23, 26 = zones 23-25 will trip 23.
F. STORE ENT TIME 30 - (seconds) - This is the maximum time from the moment an EXIT door is opened that the user is allowed to disarm the panel.
G. OUTPUT ON1/OFF0: 0 - Enables or disables the output logging feature. Default is "0" which disables the output logging. To enable, press <1><ENTER>. Upon exit from variables, select day mode again to activate the feature.
H. DAY/NIGHT OUT? 0 - Allows output #1 to be programmed to be a day/night indicator. Can be used for open/close reports or to provide an LED at entrance door. No matter which output is selected, it will only activate output #1.
I. BELL TIME 300 - (seconds) - The length of time the night outputs will stay tripped before an automatic shutdown.
J. ZONE 29 TO? 30 - To have multiple inputs, starting with zone 29 to trip output 29. Default is 30. Zones up to but not including the variable will trip output 29. Example: 30 = only zone 29 trips 29, 33 = zones 29-32 will trip 29.
K. ZONE 35 TO? 36 - To have multiple inputs, starting with zone 35 to trip output 35. Default is 36. Zones up to but not including the variable will trip output 35. Example: 36 = only zone 35 trips 35, 38 = zones 35-37 will trip 35.
L. ZONE 41 TO? 42 - To have multiple inputs, starting with zone 41 to trip output 41. Default is 42. Zones up to but not including the variable will trip output 41. Example: 42 = only zone 41 trips 41, 44 = zones 41-43 will trip 41.
M. PHRMCY ENT/EXT 15 - pharmacy entry/exit time in seconds

USERCODE PROGRAMMING

A. Program 20 valid usercodes (1-10 & 21-30). Usercodes 1-10 will be used for main store and usercodes 21-30 will be used for the pharmacy. All main store usercodes (1-10) are to be programmed with all options except for "SET ID'S & OPTIONS" & "LITERAL EDIT". All pharmacy usercodes (21-30) are to programmed with all options except for "SET ID'S & OPTIONS", "LITERAL EDIT", FULL ARM & FULL DISARM. Store Manager is to be usercode #1 and is to be given usercodes 1-10. Main Pharmacist is to be usercode #21 and is

to be given usercodes 21-30. Store Manager and Main Pharmacist are to provide you with names of individuals usercodes are issued too for programming names. Each usercode is to have the option "USER CHANGE OWN ID". This feature allows each usercode to be changed one time if the old usercode is known.

B. Each usercode must be assigned to each area. Enter <1><7><SHIFT><M>. Enter the usercode number. Unit will prompt you "AREA 1 ARM?" Select <YES> or <NO>. Unit will then prompt you "AREA 1 DISARM?" Select <YES> or <NO>. Unit will then prompt you "AREA 2 ARM?" Select <YES> or <NO>. Unit will then prompt you "AREA 2 DISARM?" Select <YES> or <NO>. Users 1-10 are to yes for area 1 arm/disarm only and user 21-30 are to be yes for area 2 arm/disarm only. User 1 for store manager is also to be programmed yes for area 2 arm ONLY, NOT DISARM.
C. Program usercodes 17 & 18 to have all capabilities. Reprogram their actual codes, code 17 to 2-4-6-1 and code 18 to be 2-4-6-2. Do not issue these codes to anyone, for NG/SWD use only.

WALKTEST MODE

This mode allows all zones to be tested while in the day mode. It will also reset all zone bells every 5 seconds so bells are not constantly kept ringing. This test must be done on all new installations.

A. Enter code 17 followed by <PART ARM 1>.
   1. Unit will respond with "WALKTEST SETUP DONE".
B. Enter code 17 followed by <SHIFT>, <YES>.
   1. Unit will respond with "REPORT TEST MONITOR". Press <PART ARM 2> To select "TEST".
C. Unit will then show "WALKTEST" followed by "TEST 1 = 1 CLOSED". Begin with zone one and proceed to test ALL zones. No one need be at the panel. Display will change to "TEST 2 = 1 CLOSED". These examples are shown assuming that zones 1 and 2 are "ON-LINE". Zones that are not on line will be skipped by the unit. Ensure all zones are tested in order. Any zones which are "ON-LINE" but are not being used may be passed over by pressing any key except <NO> which causes the walktest mode to be exited. Zones which are passed over will be logged by the printer as "NOT TESTED".
D. After all zones have been tested or passed over the unit will display "FINISHED" and go back to day mode.
E. Acknowledge all alarms.
F. Send the print out of the walktest in with your finished paper work.

COMPLETION

A. Ensure system has been tested to central station.
B. Ensure system has been set for proper entrance and exit delays as well as siren time.
C. Ensure any mess made during installation has been cleaned up.
D. Ensure the zone descriptions are correct.
E. After the system has been completely tested and zone descriptions have been checked, run off a copy of all reports. This can be done by pressing the number 17 code which should be 2461 followed by <SHIFT>,<P>. Unit will respond with "PRINT ALL REPORTS?". Press <YES>. Unit will then display each individual report with a question mark for a <YES> or <NO> response. Select yes for all reports EXCEPT the LOG. These reports must then be returned with the "As Built" drawings and Walktest printout to the Corporate office of Silent Watchman, attention Pat Molli.

F. Print another copy of the zones and place under plastic cover on front of panel. Remember to include the zone number in the zone description.
G. Completely train all store personnel and leave a copy of the operating instructions with manager.

INPUT LEM ADDRESSES

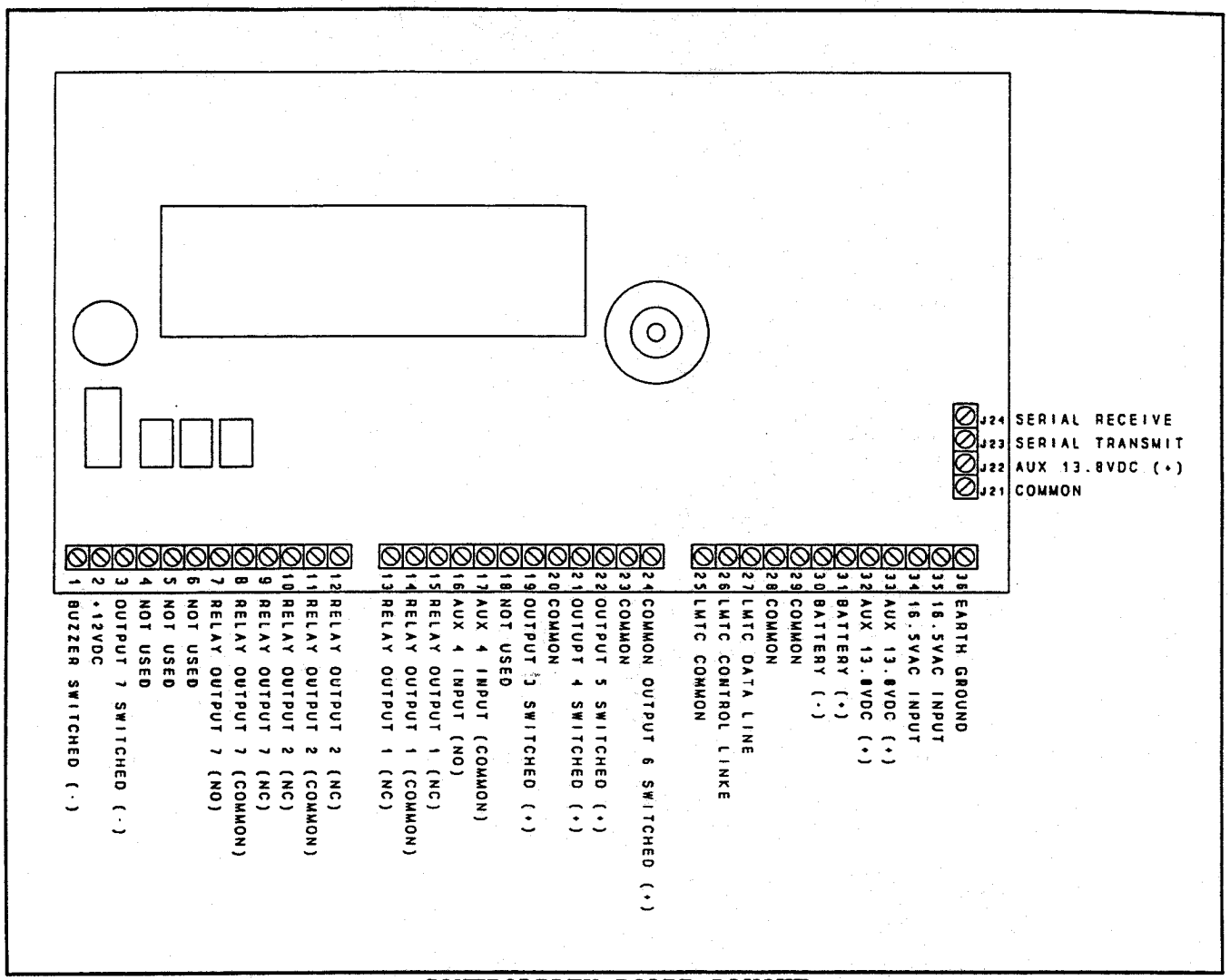
WHEN A "-" IS SHOWN, IT MEANS THE CORRESPONDING SWITCH SHOULD BE IN THE *ON* POSITION. WHEN A "#" IS SHOWN, IT MEANS THE CORRESPONDING SWITCH SHOULD BE IN THE *OFF* POSITION. EXAMPLE: (--------8) INDICATES THAT SWITCHES 1-7 SHOULD BE IN THE *ON* POSITION AND SWITCH 8 SHOULD BE IN THE *OFF* POSITION.

LEM #	SWITCHES 12345678	1ST LOOP TERM 6&7	2ND LOOP TERM 5&6	LEM #	SWITCHES 12345678	1ST LOOP TERM 6&7	2ND LOOP TERM 5&6	LEM #	SWITCHES 12345678	1ST LOOP TERM 6&7	2ND LOOP TERM 5&6
1	--------8	1	2	18	---4--7-	35	36	35	--3---78	69	70
2	------7-	3	4	19	---4--78	37	38	36	--3--6--	71	72
3	------78	5	6	20	---4-6--	39	40	37	--3--6-8	73	74
4	-----6--	7	8	21	---4-6-8	41	42	38	--3--67-	75	76
5	-----6-8	9	10	22	---4-67-	43	44	39	--3--678	77	78
6	-----67-	11	12	23	---4-678	45	46	40	--3-5---	79	80
7	-----678	13	14	24	---45---	47	48	41	--3-5--8	81	82
8	----5---	15	16	25	---45--8	49	50	42	--3-5-7-	83	84
9	----5--8	17	18	26	---45-7-	51	52	43	--3-5-78	85	86
10	----5-7-	19	20	27	---45-78	53	54	44	--3-56--	87	88
11	----5-78	21	22	28	---456--	55	56	45	--3-56-8	89	90
12	----56--	23	24	29	---456-8	57	58	46	--3-567-	91	92
13	----56-8	25	26	30	---4567-	59	60	47	--3-5678	93	94
14	----567-	27	28	31	---45678	61	62	48	--34----	95	96
15	----5678	29	30	32	--3-----	63	64	49	--34---8	97	98
16	---4----	31	32	33	--3----8	65	66	50	--34--7-	99	100
17	---4---8	33	34	34	--3---7-	67	68				

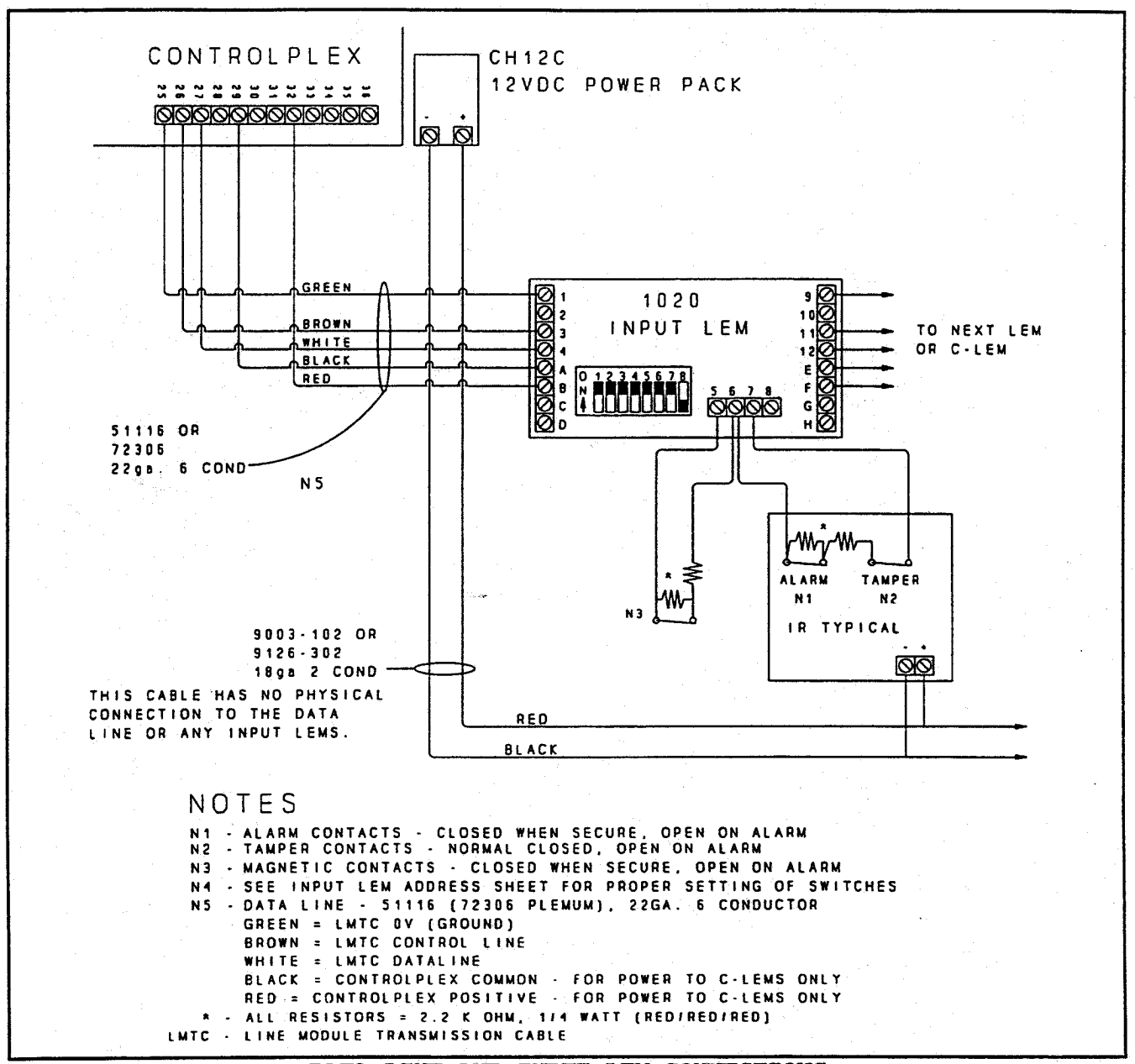
C-LEM ADDRESSES

WHEN A "-" IS SHOWN, IT MEANS THE CORRESPONDING SWITCH SHOULD BE IN THE *ON* POSITION (TOWARD THE NUMBER, AWAY FROM EDGE OF PC BOARD). WHEN A "#" IS SHOWN, IT MEANS THE CORRESPONDING SWITCH SHOULD BE IN THE *OFF* POSITION (TOWARD THE LETTER, TOWARD EDGE OF PC BOARD). EXAMPLE: (--------8) INDICATES THAT SWITCHES 1-7 SHOULD BE IN THE *ON* POSITION AND SWITCH 8 SHOULD BE IN THE *OFF* POSITION.

OUTPUT # DESIRED	SWITCHES 12345678	OUTPUT # DESIRED	SWITCHES 12345678	OUTPUT # DESIRED	SWITCHES 12345678
1	--------8	18	---4--7-	35	--3---78
2	------7-	19	---4--78	36	--3--6--
3	------78	20	---4-6--	37	--3--6-8
4	-----6--	21	---4-6-8	38	--3--67-
5	-----6-8	22	---4-67-	39	--3--678
6	-----67-	23	---4-678	40	--3-5---
7	-----678	24	---45---	41	--3-5--8
8	----5---	25	---45--8	42	--3-5-7-
9	----5--8	26	---45-7-	43	--3-5-78
10	----5-7-	27	---45-78	44	--3-56--
11	----5-78	28	---456--	45	--3-56-8
12	----56--	29	---456-8	46	--3-567-
13	----56-8	30	---4567-	47	--3-5678
14	----567-	31	---45678	48	--34----
15	----5678	32	--3-----	49	--34---8
16	---4----	33	--3----8	50	--34--7-
17	---4---8	34	--3---7-		



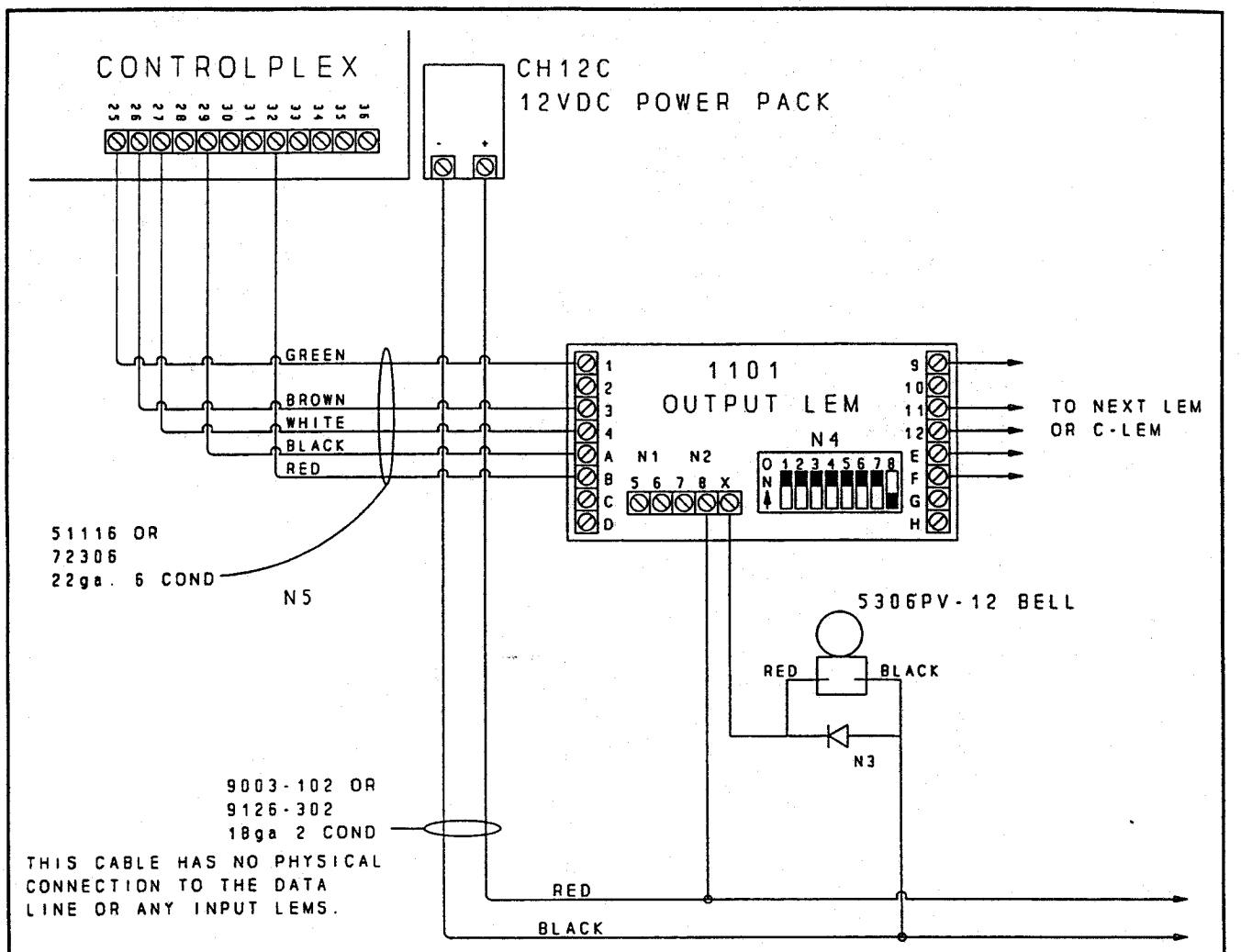
CONTROLPLEX BOARD LAYOUT



NOTES

N1 - ALARM CONTACTS - CLOSED WHEN SECURE, OPEN ON ALARM
N2 - TAMPER CONTACTS - NORMAL CLOSED, OPEN ON ALARM
N3 - MAGNETIC CONTACTS - CLOSED WHEN SECURE, OPEN ON ALARM
N4 - SEE INPUT LEM ADDRESS SHEET FOR PROPER SETTING OF SWITCHES
N5 - DATA LINE - 51116 (72306 PLEMUM), 22GA. 6 CONDUCTOR
GREEN = LMTC 0V (GROUND)
BROWN = LMTC CONTROL LINE
WHITE = LMTC DATALINE
BLACK = CONTROLPLEX COMMON - FOR POWER TO C-LEMS ONLY
RED = CONTROLPLEX POSITIVE - FOR POWER TO C-LEMS ONLY
* - ALL RESISTORS = 2.2 K OHM, 1/4 WATT (RED/RED/RED)
LMTC - LINE MODULE TRANSMISSION CABLE

DATA LINE AND INPUT LEM CONNECTIONS



NOTES

N1 - TAMPER SWITCH OUTPUT IS NORMAL CLOSED WITH COVER ON. CAN BE WIRED IN SERIES WITH DEVICE TAMPER, DOES NOT REPORT UNLESS WIRED TO AN INPUT.

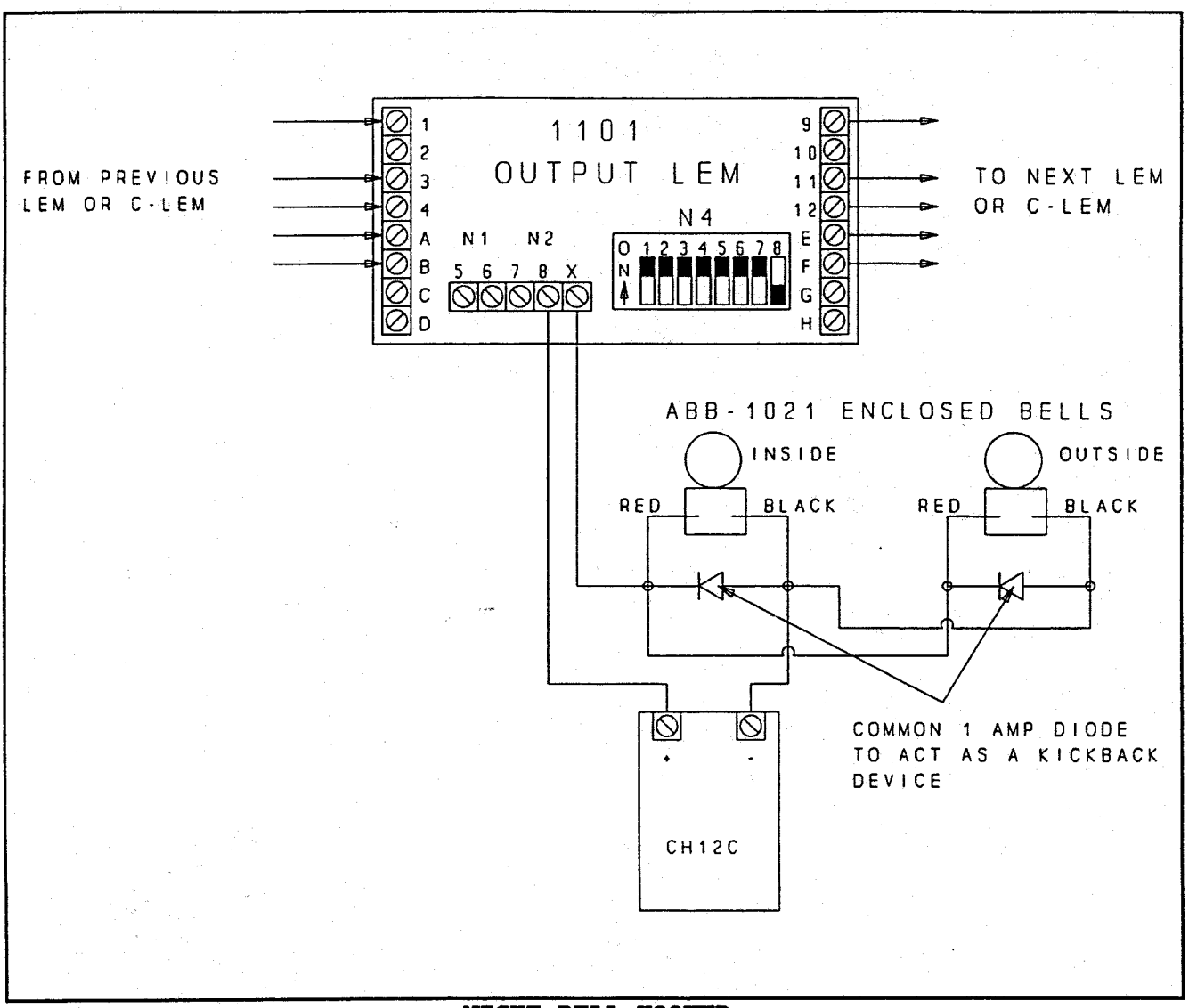
N2 - RELAY OUTPUT IS DRY CLOSURE ONLY, 7=NC, 8=C, X=NO

N3 - COMMON 1 AMP DIODE USED AS A KICKBACK DEVICE.

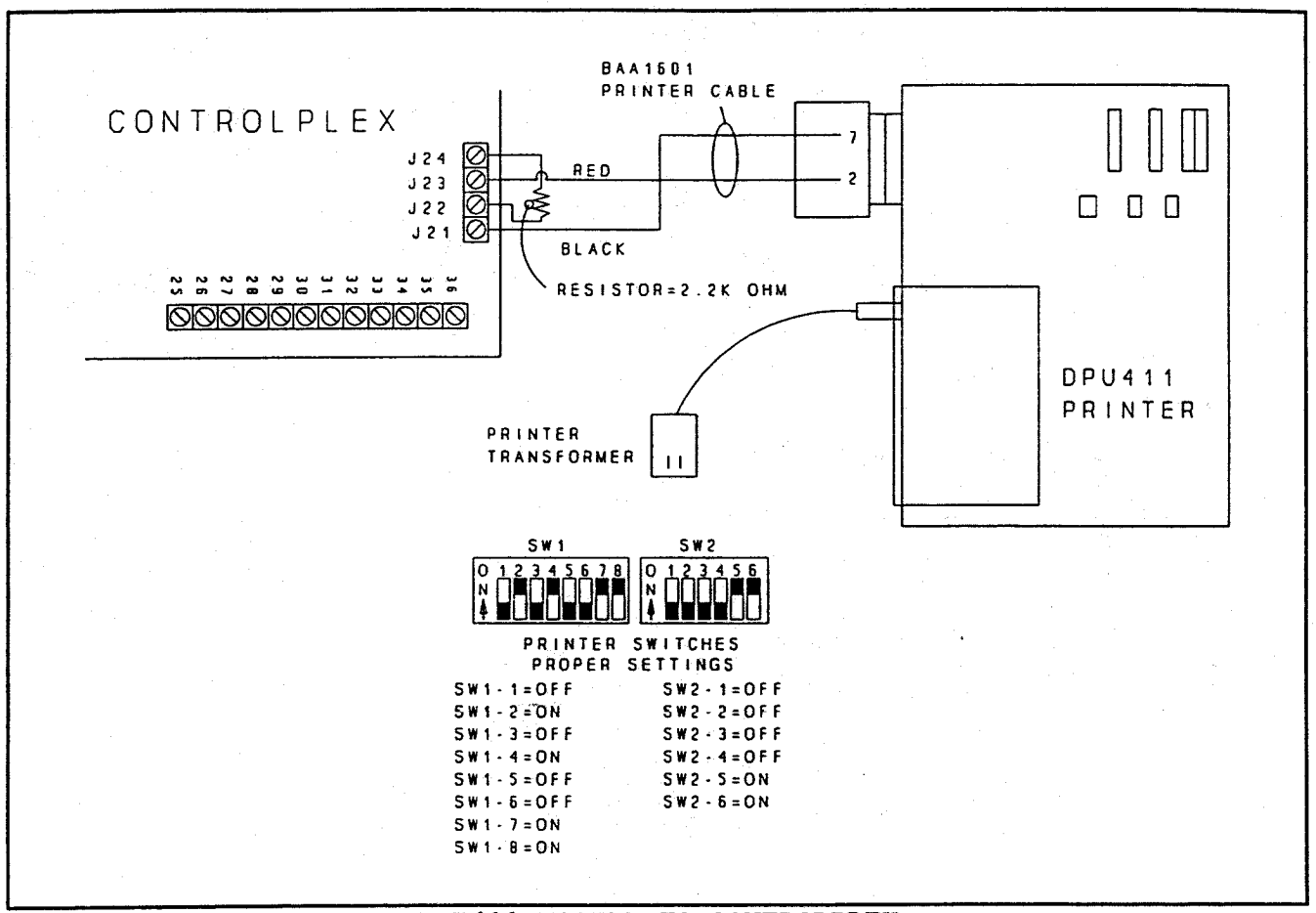
N4 - SEE INPUT LEM ADDRESS SHEET FOR PROPER SETTING OF SWITCHES

N5 - DATA LINE - 51116 (72306 PLEMUM), 22GA. 6 CONDUCTOR
GREEN = LMTC 0V (GROUND)
BROWN = LMTC CONTROL LINE
WHITE = LMTC DATALINE
BLACK = CONTROLPLEX COMMON - FOR POWER TO C-LEMS ONLY
RED = CONTROLPLEX POSITIVE - FOR POWER TO C-LEMS ONLY

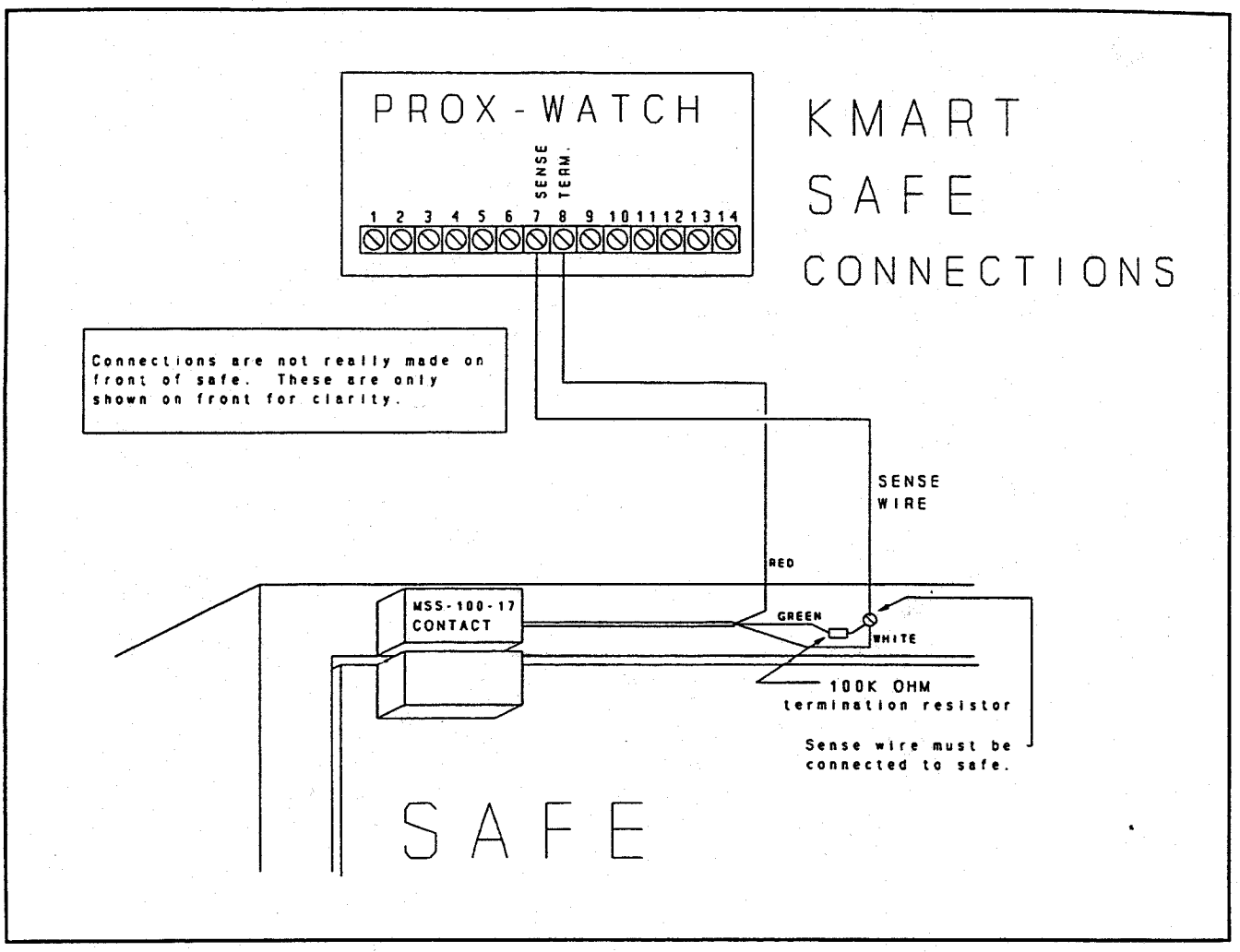
DATA LINE AND OUTPUT C-LEM CONNECTIONS



NIGHT BELL HOOKUP



DPU411 HOOKUP TO CONTROLPLEX


PROX-WATCH
SENSE
TERM.
1 2 3 4 5 6 7 8 9 10 11 12 13 14
KMART
SAFE
CONNECTIONS
Connections are not really made on front of safe. These are only shown on front for clarity.
SENSE WIRE
RED
MSS-100-17 CONTACT
GREEN
WHITE
100K OHM termination resistor
Sense wire must be connected to safe.
SAFE