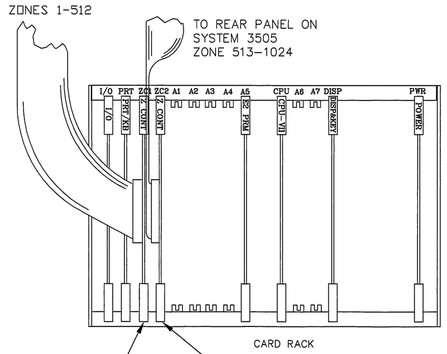
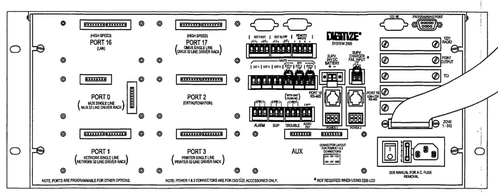
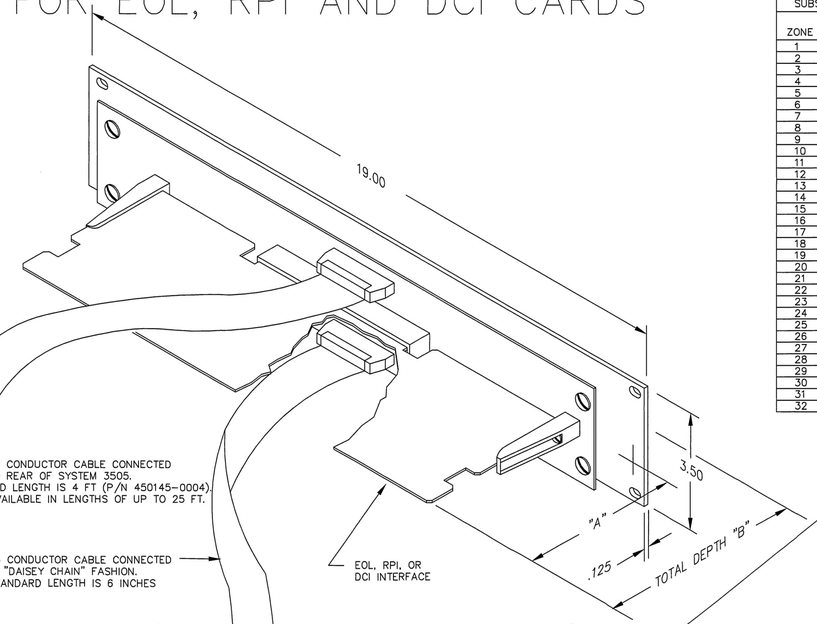
32 ZONE HOOKUP FOR EOL, RPI AND DCI CARDS





26 CONDUCTOR CABLE CONNECTED TO REAR OF SYSTEM 3505. STD LENGTH IS 4 FT (P/N 450145-0004). AVAILABLE IN LENGTHS OF UP TO 25 FT.

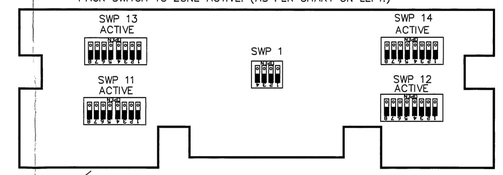
26 CONDUCTOR CABLE CONNECTED IN "DAISEY CHAIN" FASHION. STANDARD LENGTH IS 6 INCHES



SUBSCRIBER ACTIVATION		
ZONE	SWITCH PACK	SWITCH
1	11	1
2	12	1
3	13	1
4	14	1
5	11	2
6	12	2
7	13	2
8	14	2
9	11	3
10	12	3
11	12	3
12	14	3
13	11	4
14	12	4
15	13	4
16	14	4
17	11	5
18	12	5
19	13	5
20	14	5
21	11	6
22	12	6
23	13	6
24	14	6
25	11	7
26	12	7
27	13	7
28	14	7
29	11	8
30	12	8
31	13	8
32	14	8

REV	LOC	RN	CHANGE	BY	APP. BY	APP. DT
A			ORIGINAL RELEASE			
B		2290	ADDED I/O CARD	SOR	rm	8/7/02
C		2530	UPDATED DRAWING	SOR	rm	1/29/02

ON R.P.I. INTERFACE, AS EACH SUBSCRIBER IS ADDED, YOU MUST ACTIVATE ZONE BY PRESSING APPROPRIATE SWITCH PACK SWITCH TO ZONE ACTIVE. (AS PER CHART ON LEFT.)



NOTES:

1. EACH ZONE CONTROLLER MODULE PN 400090 CONTROLS A MAXIMUM OF 16 INTERFACE MODULES OF 32 ZONES EACH.

2. FIRST INTERFACE MODULE IS ATTACHED TO CONNECTOR LABLED ZONE 1 - 512 ON REAR OF SYSTEM 3505 VIA 26 CONDUCTOR RIBBON CABLE.

3. SEVENTEENTH INTERFACE MODULE IS ATTACHED TO PORT LABLED ZONE 513 - 1024 ON REAR OF SYSTEM 3505 VIA 26 CONDUCTOR RIBBON CABLE. (SECOND ZONE CONTROLLER MUST BE ADDED.)

4. FIFTEEN ADDITIONAL INTERFACE MODULES MAY BE DAISY CHAINED TO FIRST OR SEVENTEENTH MODULE. ANY COMBINATION OF EOL, RPI, OR DCI CARDS CAN BE USED.

5. EOL RES. TYPE INSTALLATION:
WHEN INSTALLING CABLE PAIR TO BARRIER STRIP, REMOVE 15K RESISTOR FROM BARRIER STRIP AND INSTALL RESISTOR AT END OF CIRCUIT, AS SHOWN AT LEFT. TOTAL CABLE RESISTANCE PER ZONE NOT TO EXCEED 7K.

6. CURRENT REVERSAL TYPE INSTALLATION:
WHEN INSTALLING CABLE TO BARRIER STRIP, HOOKUP AS SHOWN AT FAR LEFT. NO END OF LINE RESITOR REQUIRED.

7. DIMENTIONS:

TYPE	A	B
E.O.L. RESISTOR	4.60	5.13
CURRENT REVERSAL	5.25	5.78
CURRENT REVERSAL	5.25	5.78

8. CURRENT REVERSAL INTERFACE MODULE - 100VDC AT .75 AMPS. MAX.

9. END OF LINE RESISTOR INTERFACE MODULE - 0 VDC AT 0 AMPS.

10. MAX WIRE LENGTHS FOR DCI INTERFACE IS 25 FEET.

11. EACH INTERFACE MODULE OF 16 POSSIBLE PER ZONE CONTROLLER, MUST HAVE SWP1 SET FOR PROPER ZONE NUMBER RANGE AS PER TABLE BELOW.

SWP1 OPEN

INDICATES SWITCH IS UP IN POSITION MARKED "OPEN".

INTERFACE NUMBER	ZONE RANGE	SWP1 (4 3 2 1)
1	1–32	☐☐☐☐
2	33–64	☐☐☐■
3	65–96	☐☐■☐
4	97–128	☐☐■■
5	129–160	☐■☐☐
6	161–192	☐■☐■
7	193–224	☐■■☐
8	225–256	☐■■■
9	257–288	■☐☐☐
10	289–320	■☐☐■
11	321–352	■☐■☐
12	353–384	■☐■■
13	385–416	■■☐☐
14	417–448	■■☐■
15	449–480	■■■☐
16	481–512	■■■■

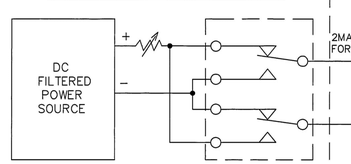
DO NOT APPLY DIRECT BATTERY VOLTAGE TO ANY RPI INPUT.
DAMAGE WILL RESULT UNLESS CURRENT LIMITING RESISTOR IS USED. LIMIT CURRENT TO .75 AMPS.

450173-0001
R.P.I. CURRENT REVERSAL INTERFACE MODULE

CONNECT TO EARTH GROUND

EARTH GROUND
GROUND ROD

TYPICAL CURRENT REVERSAL HOOKUP.



2MA TO .75A FOR SECURE

2MA TO .75A FOR ALARM

CUSTOMER LOCATION

SIGNAL LINE CIRCUIT– INTENDED FOR CONNECTION TO A POLARITY REVERSED CIRCUIT OF A CONTROL UNIT AT THE PROTECTED PREMISE HAVING TOTAL CURRENT INPUT TO CURRENT REVERSAL INPUT MODULE OF NOT GREATER THAN .75 AMPS NOR LESS THAN 2MA. IN EITHER SECURE OR ALARM CONDITION.

MAX. VOLTAGE INPUT FOR ZERO OHMS LINE RESISTANCE IS 1.5~2.5 VOLTS DC.

TO CALCULATE V AT POWER SOURCE, USE THE FOLLOWING FORMULA:
V(POWER SOURCE)=[(2MA)(LINE RESISTANCE)]+1.5 VOLTS
i.e. FOR A LINE RESISTANCE OF 100 OHMS:
V=[(2MA)(100 OHM)]+ 1.5 VOLTS
V=1.7 VDC

MAX LINE RESISTANCE=50K OHMS.

E.O.L. RES. INTERFACE MODULE 450173-0002

EOL-32

TYPICAL USER SUPPLIED E.O.L. CIRCUIT

BREAK WIRE RUN TO MAINTAIN SUPERVISION

TYPICAL TROUBLE CONTACT

TYPICAL 15K RES

TYPICAL ALARM CIRCUIT

WHEN INSTALLING CABLE PAIR, REMOVE 15K RESISTOR AND DISCARD. INSTALL APPROPRIATE EOL RESISTOR AT END OF CIRCUIT. BREAK WIRE RUN TO MAINTAIN SUPERVISION.

MAX. VOLTAGE: ±12 VDC*
MAX. CURRENT: 1MA
MAX. LINE RES: 7K OHMS BALANCED (3.5K OHMS PER LINE)

*THIS VOLTAGE SUPPLIED BY THD SYSTEM 3500. NO EXTERNAL VOLTAGE IS TO BE CONNECTED TO BARRIERSTRIPS.

D.C.I. INTERFACE MODULE 450173-0003

TROUBLE CONTACT MUST BE CONNECTED IN SERIES WITH THE END OF LINE RESISTOR AND BE LOCATED ELECTRICALLY AFTER ANY DEVICES CONNECTED ACROSS THE LINES.

EARTH GROUND
GROUND ROD

UNSUPERVISED ALARM TRIP POINT FOR CONNECTION TO EQUIPMENT WITHIN THE SAME ENCLOSURE. MAX. LENGTH 25 FEET.

COMMON SIDE

CONTROLLED
JAN 12 2005
COPY

USED ON NEXT ASS'Y:

DRN 1/29/02 r.m
CHK
ENG
APP

UNLESS OTHERWISE SPECIFIED .000=.005 .00=.015 ANG TOL=1/2°

MATERIAL

SCALE

DIGITIZE®

INSTALLATION DWG: SYSTEM 3505 ZONE MODULES

SIZE D 800321 REV

DIGITIZE DRAWINGS FOR REFERENCE ONLY.

TITLE 2
CONSTRUCTION
3/22/2005

PROFESSIONAL SEAL (IF REVISION, APPLIES ONLY TO REVISED WORK) | ISSUE (PROGRESS, ESTIMATE, BID, CONSTRUCTION, CONFORMED, REVISION, RECORD) | REVISION NUMBER | DRAWN BY | CHECKED BY | APPR'D BY | DATE | REMARKS

48 DIGITIZE FIRE ALARM SYS
INSTALLATION DRAWING SYSTEM 3505
ZONE MODULES

UNIVERSITY OF CALIFORNIA
LAWRENCE BERKELEY NATIONAL LABORATORY
FACILITIES DIVISION

DRAWN BY	AD	3/22/2005
CHECKED BY	MCG	3/22/2005
APPROVED BY	MCG	3/22/2005
CAD FILE PATH	00019058	
SCALE	As Noted	
DRAWING NO.	4B48E045_	SHEET 1 OF 1
PROJECT NO.	FE5011	