

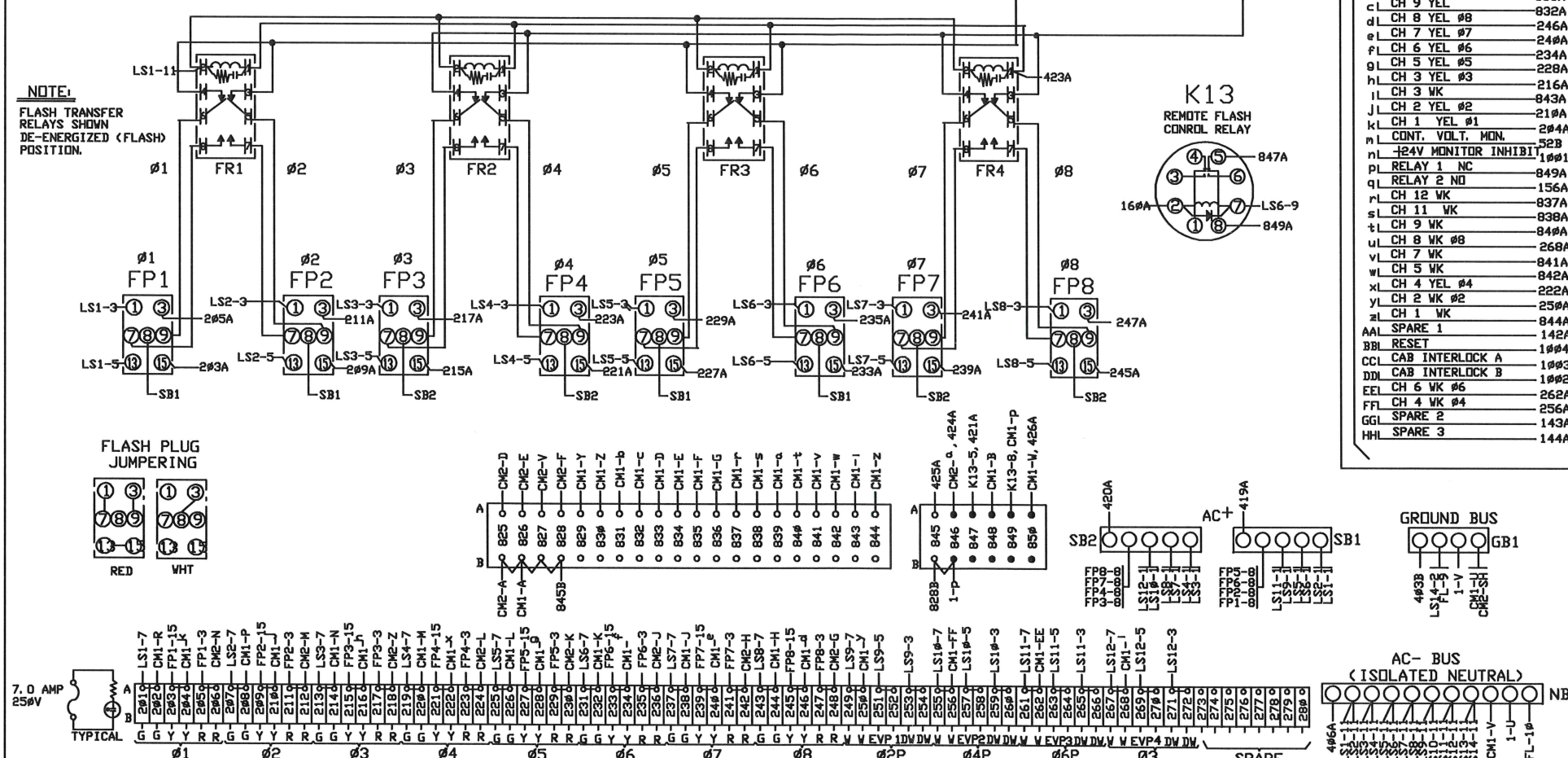
NOTE: 305, 310, 315, 320, 325, 330, 335, 340, 347, 352, 357, 362, 367 AND 372 ARE INTERCONNECTED BY THE WIEDMULLER MOUNTING RAIL.

JUMPERS 335A-337A AND 340A-342A, ARE TO BE ADDED AS NEEDED FOR EVP.

LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CONT	1	2	3	4	5	6	7	8	2P	4P	6P	8P		
PLAN														

IN	10	62A	69A	76A	82A	102A	109A	116A	122A	129A	136A	143A	150A
GREEN / WALK													
YELLOW/PED CLR	8	63A	70A	77A	83A	103A	110A	117A	123A	142B	144B	146B	148B
RED/DON'T WALK	6	64A	71A	78A	84A	104A	111A	118A	124A	143A	145A	147A	149A
OUT	7	201A	207A	213A	219A	225A	231A	237A	243A	249A	255A	261A	267A
YELLOW	5	FP1-13	FP2-13	FP3-13	FP4-13	FP5-13	FP6-13	FP7-13	FP8-13	251A	257A	263A	269A
RED/DON'T WALK	3	FP1-1	FP2-1	FP3-1	FP4-1	FP5-1	FP6-1	FP7-1	FP8-1	253A	259A	265A	271A
P	9												
W	2												
E	11	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1
R	1	SB1	SB1	SB2	SB2	SB1	SB1	SB2	SB2	SB1	SB2	SB1	SB2



TIGHTENING TORQUE SPECIFICATIONS

SCREW SIZE	6-32	8-32	10-32
POUND INCHES	12	16	25.9
BLOCK TYPE	SAK56	RK6-10	SAK35N
POUND INCHES	10.5	16	35
BLOCK TYPE	ZB35	ZB10	
POUND INCHES	35.5	17.75	

VEHICLE SIGNALS

SIGNAL	TERMINAL		
	G	Y	R
1-1	201	203	205
1-2	202	204	206
2-1, 2-3		207	209 211
2-2, 2-4		208	210 212
3-1		213	215 217
3-2	213		214 216 218
3-3	213	215	217
3-4	214	216	218
4-1		219	221 223
4-2	219		220 222 224
4-3	219	221	223
4-4	220	222	224
5-1	225	227	229
5-2	226	228	230
6-1, 6-3		231	233 235
6-2, 6-4		232	234 236

SIGNAL HEAD NEUTRALS TO BE TERMINATED ON FNB1

VEH DETECTORS

DET	TERMINAL
1-1	303, 304
1-2	306, 307
2-1	345, 346
2-2	348, 349
3-1	358, 359
3-2	368, 369
3-3	365, 366
3-4	313, 314
3-5	316, 317
4-1	355, 356
4-2	323, 324
4-3	326, 327
4-4	328, 329
4-5	331, 332
5-1	308, 309
5-2	311, 312
6-1	350, 351
6-2	353, 354

PED SIGNALS

SIGNAL	TERMINAL
P2-1	249 253
P2-2	250 254
P4-1	255 259
P4-2	256 260
P6-1	261 265
P6-2	262 266
P3-1	267 271
P3-2	268 272

PED HEAD NEUTRALS TO BE TERMINATED ON FNB1

PED PUSHBUTTONS

PPB	TERMINAL
PB2-1, 2-2	301
PB4-1, 4-2	302
PB6-1, 6-2	343
PB3-1, 3-2	344

EVP SENSORS

CONTR. CHAN.	PHASES	POLE #	SIGNAL	DC(+)	GND
2	1-6	1	333	334	337
3	2-5	3	336	334	337
4	3	2	338	339	342
5	4	4	341	339	342

EVP CONFIRMATORY LIGHTS

CONTR. CHAN.	PHASES	POLE #	TERM
2	1-6	1	251
3	2-5	3	257
4	3	2	263
5	4	4	269

1) IF EVP HEADS ARE INSTALLED JUMPER 367B TO 369B AND / OR 355B TO 337B

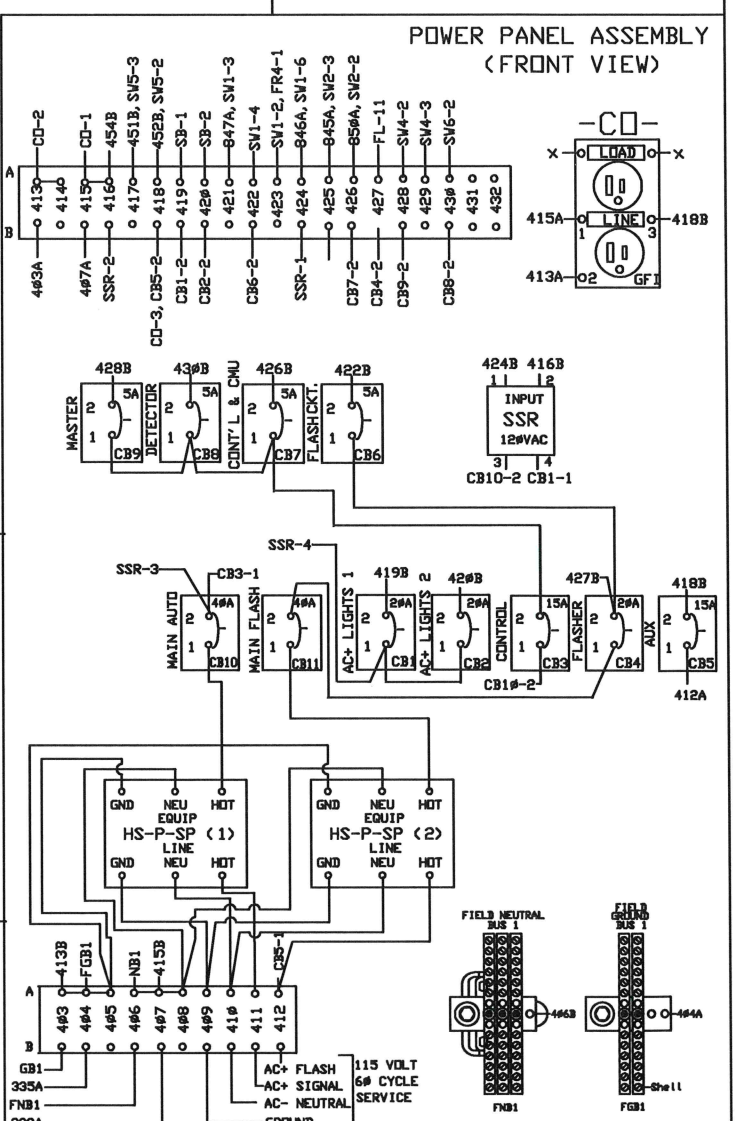
NEMA 12CH CONFLICT MONITOR

CM1	CM2
SHL SHELL GROUND	GB1
AL AC+I	825B
BL RELAY 1 NO	848A
CL RELAY 2 NC	141A
DL CH 12 GRN	833A
EL CH 11 GRN	834A
FL CH 10 GRN	835A
GL CH 9 GRN	836A
HL CH 8 GRN #8	244A
JL CH 7 GRN #7	238A
KL CH 6 GRN #6	232A
LL CH 5 GRN #5	226A
ML CH 4 GRN #4	220A
NL CH 3 GRN #3	214A
PL CH 2 GRN #2	208A
RL CH 1 GRN #1	202A
SL -24V MONITOR I	59B
TL LOGIC GROUND	53B
UL CHASSIS GROUND	53B
VL AC-(NEUTRAL)	SHELL
WL RELAY 1 COMMON(CAG)	NB1
XL RELAY 2 COMMON (LCL)	54B
YL CH 12 YEL	829A
ZL CH 11 YEL	830A
al CH 10 WK	839A
bl CH 10 YEL	831A
cl CH 9 YEL	832A
dl CH 8 YEL #8	246A
el CH 7 YEL #7	240A
fl CH 6 YEL #6	234A
gl CH 5 YEL #5	228A
hl CH 3 WK	216A
il CH 2 YEL #2	843A
jl CH 1 YEL #1	210A
kl CH 1 YEL #1	204A
nl CONT. VOLT. MON.	52B
pl -24V MONITOR INHIBIT	1001B
pl RELAY 1 NC	849A
ql RELAY 2 NO	156A
rl CH 12 WK	837A
sl CH 11 WK	838A
tl CH 9 WK	840A
ul CH 8 WK #8	268A
vl CH 7 WK	841A
wl CH 5 WK	842A
xl CH 4 YEL #4	222A
yl CH 2 WK #2	250A
zl CH 1 WK	844A
aal SPARE 1	142A
bbL RESET	1004B
ccL CAB INTERLOCK A	1003B
ddL CAB INTERLOCK B	1002B
eel CH 6 WK #6	262A
ffL CH 4 WK #4	256A
ggL SPARE 2	143A
hhl SPARE 3	144A

CONFLICT MONITOR MATRIX PROGRAMMING INSTRUCTIONS

1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12
1-3	2-4	3-5	4-6	5-7	6-8	7-9	8-10	9-11	10-12	
1-4	2-5	3-6	4-7	5-8	6-9	7-10	8-11	9-12		
1-5	2-6	3-7	4-8	5-9	6-10	7-11	8-12			
1-6	2-7	3-8	4-9	5-10	6-11	7-12				
1-7	2-8	3-9	4-10	5-11	6-12					
1-8	2-9	3-10	4-11	5-12						
1-9	2-10	3-11	4-12							
1-10	2-11	3-12								
1-11	2-12									
1-12										

CHANNEL # COMBINATIONS NOT PINNED WITH MATRIX JUMPERS CONSTITUTE CONFLICTING MOVEMENTS. TO PROGRAM, CIRCLE PERMISSIVE COMBINATIONS AND INSTALL JUMPERS ON CORRESPONDING PINS IN THE PROGRAM CARD.



ACT Electronics, Inc.

#32 AT AIRPORT

REV. STATUS

SHEET	1	2	3
REV	A	A	A

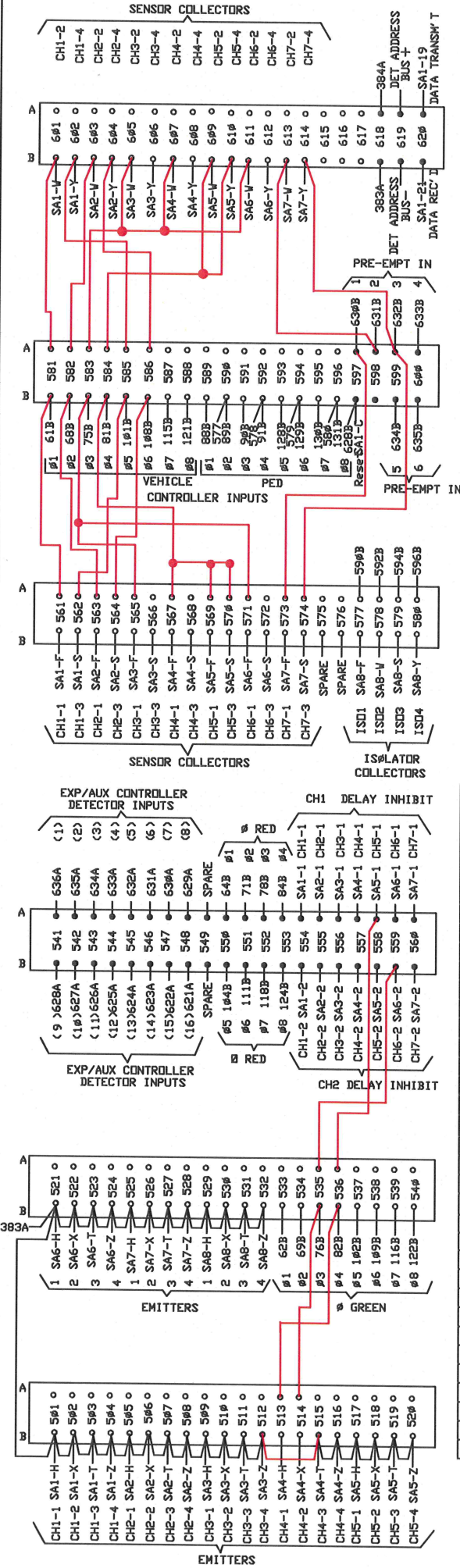
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REV A SHEET 1 OF 2

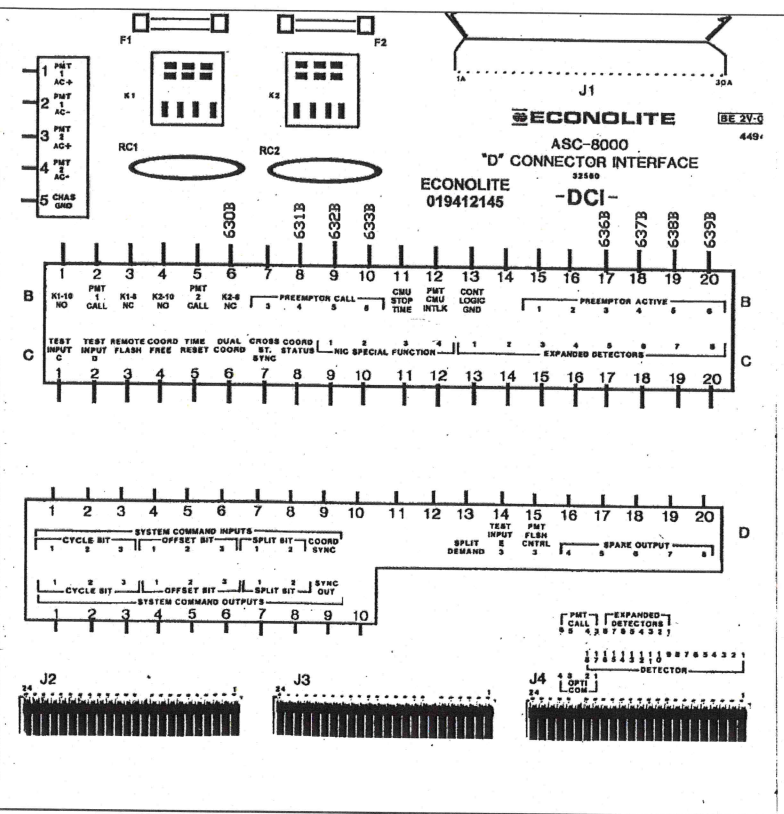


SENSOR PROGRAM PANEL

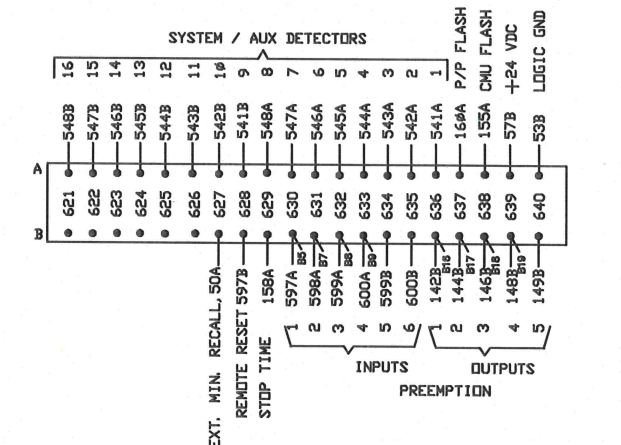


ASC 8000 "D" CONNECTOR INTERFACE PANEL

FUNCTION	TERM
1 PREEMPT #5 ACTIVE	
2 SYSTEM COMMAND OFFSET BIT 3 OUTPUT	
3 SPLIT DEMAND	
4 SYSTEM COMMAND CROSS SYNC INPUT	
5 CROSS STREET SYNC	
6 SYSTEM COMMAND CYCLE BIT 3 INPUT	
7 NOT USED	
8 NIC SPECIAL FUNCTION 2	
9 SYSTEM COMMAND OFFSET BIT 2 INPUT/EXTERNAL ADDRESS BIT 4	
10 SYSTEM COMMAND OFFSET BIT 1 INPUT/EXTERNAL ADDRESS BIT 1	
11 NIC SPECIAL FUNCTION SPARE OUTPUT 2	
12 SYSTEM COMMAND OFFSET BIT 1 INPUT/EXTERNAL ADDRESS BIT 0	
13 EXPANDED DETECTOR #8	
14 TIME RESET	
15 PREEMPTOR FLASH CONTROL	
16 SYSTEM COMMAND OFFSET BIT 1 INPUT/EXTERNAL ADDRESS BIT 3	
17 EXPANDED DETECTOR #1	
18 EXPANDED DETECTOR #4	
19 TEST INPUT E	
20 TEST INPUT C	
21 SYSTEM COMMAND SPLIT BIT 1 OUTPUT	
22 PREEMPTOR #3 ACTIVE	
23 PREEMPTOR #1 ACTIVE	
24 NIC SPECIAL FUNCTION SPARE OUTPUT 1	
25 SYSTEM COMMAND CYCLE BIT 1 INPUT	
26 COORD FREE	
27 COORD STATUS	
28 NIC SPECIAL FUNCTION 1	
29 SYSTEM COMMAND CYCLE BIT 3 OUTPUT	
30 EXPANDED DETECTOR #6	
31 EXPANDED DETECTOR #3	
32 PREEMPTOR #2 ACTIVE	
33 SYSTEM COMMAND OFFSET BIT 1 OUTPUT	
34 PREEMPTOR #4 ACTIVE	
35 SYSTEM COMMAND CYCLE BIT 2 INPUT	
36 SYSTEM COMMAND OFFSET BIT 2 INPUT/EXTERNAL ADDRESS BIT 2	
37 TEST INPUT D	
38 DUAL COORD	
39 EXPANDED DETECTOR #5	
40 EXPANDED DETECTOR #7	
41 SPARE OUTPUT 4	
42 SYSTEM COMMAND OFFSET BIT 2 OUTPUT	
43 SYSTEM COMMAND CYCLE BIT 1 OUTPUT	
44 SYSTEM COMMAND CYCLE BIT 2 OUTPUT	
45 SPARE OUTPUT 3	
46 SYSTEM COMMAND SPLIT BIT 2 OUTPUT	
47 EXPANDED DETECTOR #2	
48 PREEMPTOR #6 ACTIVE	
49 PREEMPTOR CALL #6	
50 PREEMPTOR CALL #3	
51 SPARE OUTPUT 6	
52 SPARE OUTPUT 7	
53 SYSTEM COMMAND SYNC OUT	
54 SPARE OUTPUT 8	
55 PREEMPTOR CALL #4	
56 PREEMPTOR CALL #5	
57 NOT USED	
58 CMU STOP TIME (CONFLUENT FLASH)	
59 PREEMPTOR CMU INTERLOCK (K PULL UP)	
60 REMOTE FLASH	



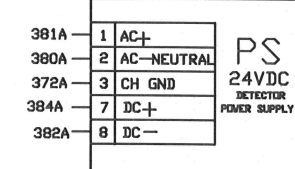
4th CONNECTOR TERMINATION BLOCK



SA DETECTORS AND PPB ISOLATION

⊕ SA1 THROUGH SA7 ARE WIRED TO ACCEPT VEH DET. OR EVP DISCRIMINATOR OR PPB ISOLATOR.

WIRE COLOR	SA I/O BLOCK	EDGE CONN.	SA DETECTORS								FUNCTIONS			
			SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8				
1 BLK/YEL	A	DC GROUND	382B 4									NC	SPARE	A
2 RED	B	24V DC+	384B 4									NC	SPARE	B
3 BLK/BLU	C	REMOTE RESET	597B 4									NC	SPARE	C
BRN	3	D-4 CH 1 LOOP	303A	345A	313A	355A	323A	365A	333A	301A	379A	INPUT CH 1	D	
WHT/BRN	4	E-5 CH 1 LOOP	304A	346A	314A	356A	324A	366A	334A	379A	INPUT COMMON	E		
5 ORANGE	6	ADDRESS BIT# 0	619B	SA1-15	SA2-10	SA3-15	SA4-15	SA5-10	SA6-15	NC				
WHT/BLU	5	F CH 1 OUTPUT (+)	561B	563B	565B	567B	569B	571B	573B	577B	OUTPUT CH 1 (+)	F		
BLUE	6	H CH 1 OUTPUT (-)	501B	505B	509B	513B	517B	521B	525B	529B	OUTPUT CH 1 (-)	H		
BLK/RED	7	J-8 CH 2 LOOP	306A	348A	316A	358A	326A	368A	336A	302A	INPUT CH 2	J		
BLK/WHT	8	K-9 CH 2 LOOP	307A	349A	317A	359A	327A	369A	337A	379B	INPUT COMMON	K		
6 YELLOW	10	ADDRESS BIT# 1	619A	SA1-6	SA3-6	SA4-6	SA4-10	SA5-15	SA7-6	NC				
12 GREEN	L	CHASSIS GROUND	340A 4								CHASSIS GROUND	L		
15 WHITE	M	AC-	SA2-M 4								380B	AC- (NEUTRAL)	M	
13 BLACK	N	115V AC+	SA2-N 4								381A	115V AC+	N	
ORANGE	9	P-13 LOOP CH 3	308A	350A	318A	360A	328A	370A	338A	343A	INPUT CH 3	P		
WHT/DR	10	R-14 LOOP CH 3	309A	351A	319A	361A	329A	371A	339A	379B	INPUT COMMON	R		
	15	ADDRESS BIT# 2	SA1-10	SA2-6	SA3-15	SA3-10	SA5-6	SA6-10	SA7-10	NC				
WHT/GRY	11	S CH 3 OUTPUT (+)	562B	564B	566B	568B	570B	572B	574B	579B	OUTPUT CH 3 (+)	S		
GREY	12	T CH 3 OUTPUT (-)	503B	507B	511B	515B	519B	523B	527B	531B	OUTPUT CH 3 (-)	T		
YELLOW	13	U-17 CH 4 LOOP	311A	353A	321A	363A	331A	373A	341A	344A	INPUT CH 4	U		
WHT/YEL	14	V-18 CH 4 LOOP	312A	354A	322A	364A	332A	374A	342A	379A	INPUT COMMON	V		
8 GREY	19	DATA TRANSMIT	620A 4								NC			
10 VIOLET	21	DATA RECEIVE	620B 4								NC			
WHT/VIO	15	W CH 2 OUTPUT (+)	601B	603B	605B	607B	609B	611B	613B	578B	OUTPUT CH 2 (+)	W		
VIOLET	16	X CH 2 OUTPUT (-)	502B	506B	510B	514B	518B	522B	526B	530B	OUTPUT CH 2 (-)	X		
WHT/GRN	17	Y CH 4 OUTPUT (+)	602B	604B	606B	608B	610B	612B	614B	580B	OUTPUT CH 4 (+)	Y		
WHT/BLK	18	Z CH 4 OUTPUT (-)	504B	508B	512B	516B	520B	524B	528B	532B	OUTPUT CH 4 (-)	Z		
WHT/RED	1	1 CH 1 GREEN	554A	555A	556A	557A	558A	559A	560A		SPARE			
RED	2	2 CH 2 GREEN	554B	555B	556B	557B	558B	559B	560B		SPARE			



REV. STATUS

SHEET	1	2	3
REV	A	A	A

ACT Electronics, Inc.

#32@AIRPORT RD

MNDOT 1999 'R' & 'P' CABINET

DATE 8/25/99

SCALE

REV A SHEET 3 OF 3