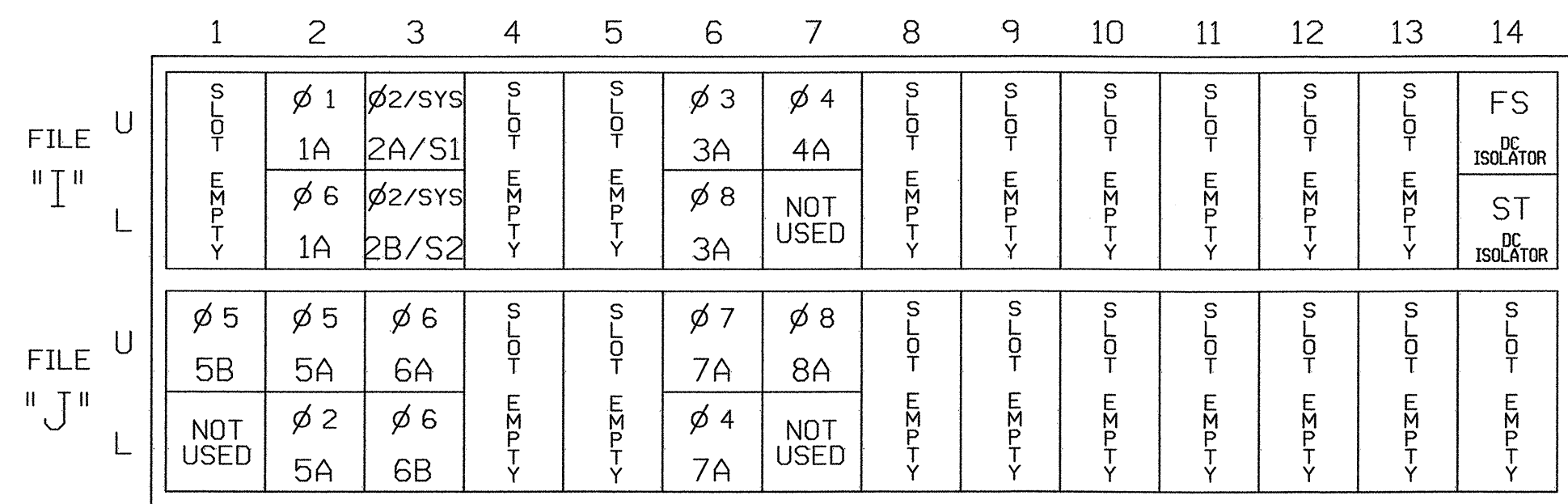


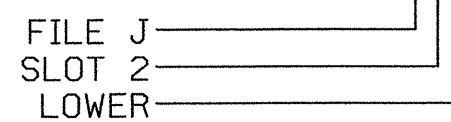
INPUT FILE POSITION LAYOUT
(front view)



EX. : 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

INPUT FILE POSITION LEGEND: J2L



INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A ¹	TB2-5,6	I2U	39	1	2	1	Y	Y	-	---	15
	TB2-7,8	I2L	43	5	12	6	Y	Y	Y	---	3
* 2A/S1	TB2-9,10	I3U	63	25	32	2/SYS	Y	Y	-	---	--
* 2B/S2	TB2-11,12	I3L	76	38	42	2/SYS	Y	Y	-	---	--
3A ²	TB4-9,10	I6U	41	3	4	3	Y	Y	-	---	15
	TB4-11,12	I6L	45	7	14	8	Y	Y	-	---	3
4A	TB6-1,2	I7U	65	27	34	4	Y	Y	-	---	--
5B	TB3-1,2	J1U	55	17	5	5	Y	Y	-	---	15
5A ³	TB3-5,6	J2U	40	2	6	5	Y	Y	-	---	15
	TB3-7,8	J2L	44	6	16	2	Y	Y	Y	---	3
6A	TB3-9,10	J3U	64	26	36	6	Y	Y	-	---	--
6B	TB3-11,12	J3L	77	39	46	6	Y	Y	-	---	--
7A ⁴	TB5-9,10	J6U	42	4	8	7	Y	Y	-	---	15
	TB5-11,12	J6L	46	8	18	4	Y	Y	-	---	3
8A	TB7-1,2	J7U	66	28	38	8	Y	Y	-	---	10

- 1 DENOTES ADD JUMPERS FOR LOOP 1A FROM TB2-5 TO TB2-7, AND FROM TB2-6 TO TB2-8.
 - 2 DENOTES ADD JUMPERS FOR LOOP 3A FROM TB4-9 TO TB4-11, AND FROM TB4-10 TO TB4-12.
 - 3 DENOTES ADD JUMPERS FOR LOOP 5A FROM TB3-5 TO TB3-7, AND FROM TB3-6 TO TB3-8.
 - 4 DENOTES ADD JUMPERS FOR LOOP 7A FROM TB5-9 TO TB5-11, AND FROM TB5-10 TO TB5-12.
- * SYSTEM DETECTOR.

NOTES

- TO PREVENT "FLASH-CONFLICT" PROBLEMS, INSERT RED FLASH PROGRAM BLOCKS FOR ALL UNUSED VEHICLE LOAD SWITCHES IN THE OUTPUT FILE. THE INSTALLER SHALL VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS.
- ENSURE THAT RED ENABLE IS ACTIVE AT ALL TIMES DURING NORMAL OPERATION. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS, TIE UNUSED RED MONITOR INPUTS 9,10,11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER CABINET MANUFACTURER'S INSTRUCTIONS.
- PROGRAM CONTROLLER TO START UP IN PHASES 2 AND 6 GREEN.
- ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
- PROGRAM PHASES 4 AND 8, ON CONTROLLER UNIT, FOR DUAL ENTRY.
- PROGRAM PHASES 2 AND 6, ON CONTROLLER UNIT, FOR VARIABLE INITIAL AND GAP REDUCTION.
- THE CONTROLLER AND CABINET ARE TO BE PROGRAMMED AND WIRED TO BE PART OF A CLOSED LOOP SIGNAL SYSTEM.
CONTROLLER ASSET: 0189 MASTER ASSET: 10307

FIELD CONNECTION HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5	S6	S6P	S7	S8	S8P
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	61	21,22, 23	NU	23,81	41,42	NU	21,42	61,62, 63	NU	41,63	81,82	NU
GREEN		130			103			136			109	
YELLOW		129			102			135			108	
RED	*	128		*	101		*	134		*	107	
RED ARROW												
YELLOW ARROW	126			117			132			123		
GREEN ARROW	127			118			133			124		

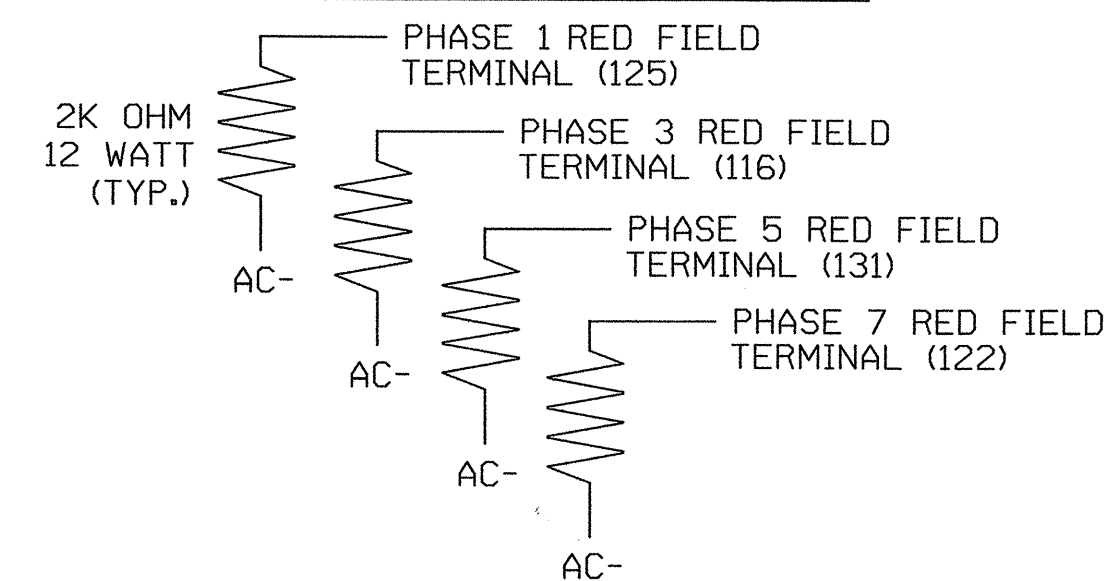
NU = NOT USED

* DENOTES INSTALL LOAD RESISTOR. SEE LOAD RESISTOR INSTALLATION DETAIL THIS PAGE.

EQUIPMENT INFORMATION

CONTROLLER.....CONTRACTOR SUPPLIED 2070L
 CABINETCONTRACTOR SUPPLIED 332
 SOFTWAREECONOLITE OASIS
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...12
 LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8
 PHASES USED.....1,2,3,4,5,6,7,8
 OVERLAPS.....NONE

LOAD RESISTOR INSTALLATION DETAIL



NOTE: THE PURPOSE OF THESE RESISTORS IS TO LOAD THE CHANNEL RED MONITOR INPUTS IN ORDER FOR THE SIGNAL SEQUENCE MONITOR TO USE THE FULL SIGNAL SEQUENCE MONITORING CAPABILITY ON CHANNELS THAT DO NOT USE THE RED DISPLAY IN THE FIELD.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0189
 DESIGNED: AUGUST 2003
 SEALED: 12/11/2003
 REVISED: TBD

SEPI ENGINEERING GROUP
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 Raleigh, NC 27607
 Tel:919-789-9977 Fax:789-9591

SIGNAL UPGRADE PAGE 1 OF 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

 122 N. McDowell St., Raleigh, NC 27603

US 76 (OLEANDER DR / WRIGHTSVILLE AVE.) AT SR 1411 (AIRLIE RD/WRIGHTSVILLE AVE)

DIVISION 03 NEW HANOVER COUNTY WILMINGTON

PLAN DATE: NOVEMBER 2003 REVIEWED BY: J O DEATON
 PREPARED BY: M W YALCH REVIEWED BY:

REVISIONS INIT. DATE

Signature: DATE: 12/16/03
 SIG. INVENTORY NO. 03-0189