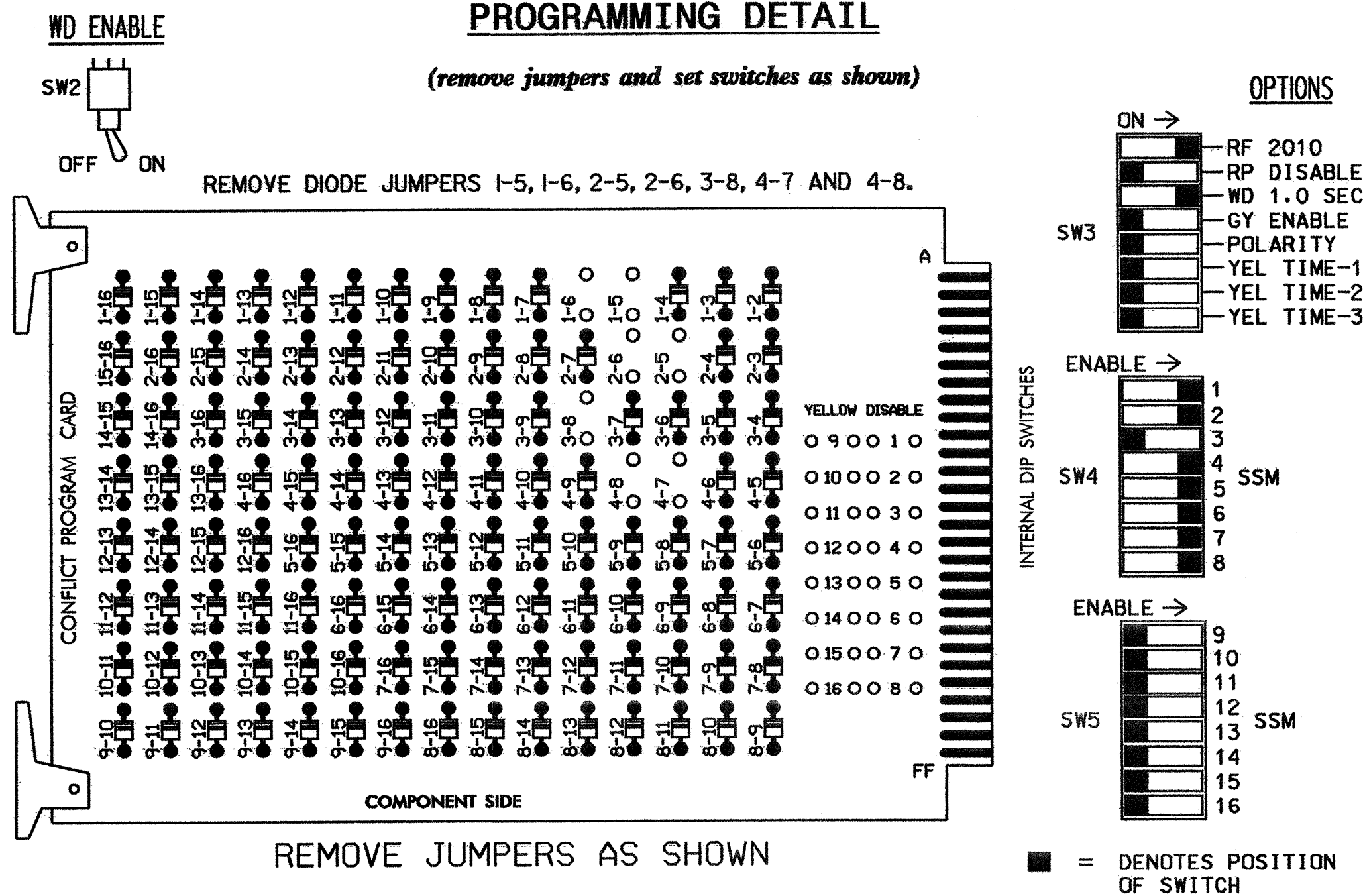


EDI MODEL 2010ECL CONFLICT MONITOR

PROGRAMMING DETAIL



- NOTES:
- CARD IS PROVIDED WITH ALL DIODE JUMPERS IN PLACE. REMOVAL OF ANY JUMPER ALLOWS ITS CHANNELS TO RUN CONCURRENTLY.
 - MAKE SURE JUMPERS SEL1-SEL5 ARE PRESENT ON THE MONITOR BOARD.

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 3,9, 10,11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER THE 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.
- THE CABINET AND CONTROLLER ARE PART OF THE GASTONIA CITY SIGNAL SYSTEM.

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	NU	81	41,42	NU	21	61,62	NU	41	81,82	NU
GREEN		130			103			136			109	
YELLOW		129		*	102			135			108	
RED	*	128			101		*	134		*	107	
RED ARROW												
YELLOW ARROW	126						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 3.00.92 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

* USED DURING PREEMPT ONLY

BACK-UP PROTECTION PROGRAMMING DETAIL

(program controller as shown below)

- FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE DYNAMIC/BACKUP CONTROL FUNCTIONS 1, 2 AND 3.
- FROM PHASE CONTROL FUNCTIONS MENU PRESS '2' (DYNAMIC/BACKUP CONTROL FUNCTIONS).

INPUT FILE POSITION LAYOUT

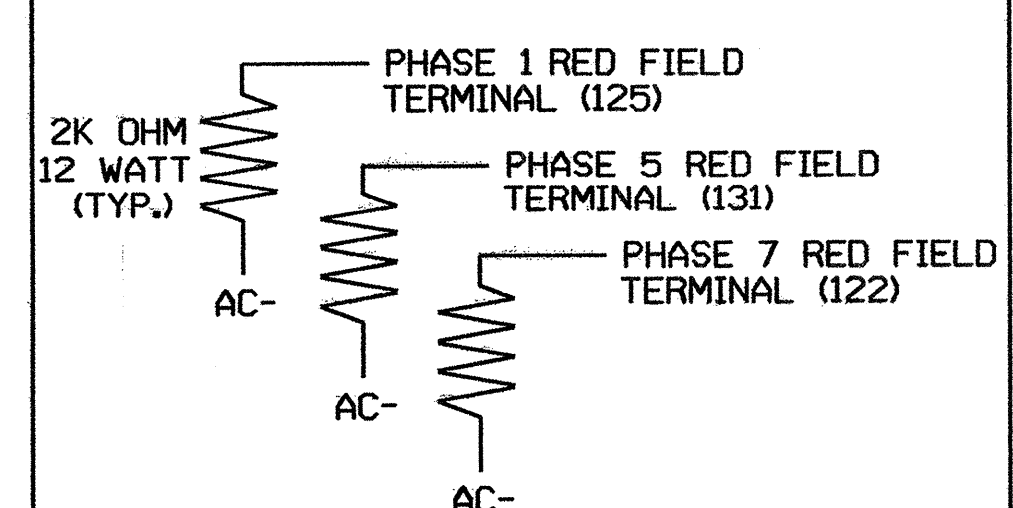
(front view)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅ 1	∅ 2	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14
L	1A	2A,2B	∅ 6	∅ 2	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12
U	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14	PRE1	AC ISOLATOR	DC ISOLATOR	ST
L	5A	6A,6B	∅ 2	∅ 6	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12
	5A	6C,6D	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14

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

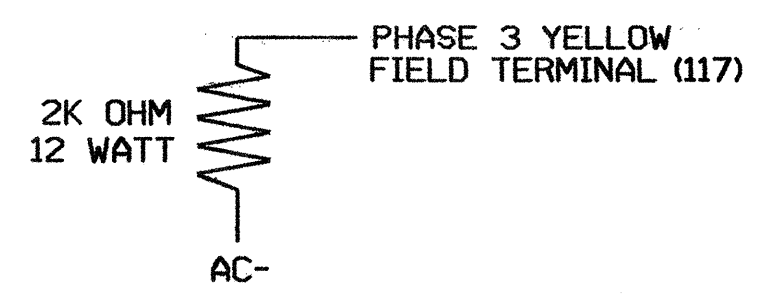
FS = FLASH SENSE
ST = STOP TIME
PRE = PREEMPT

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.

LOAD RESISTOR INSTALLATION DETAIL



NOTE: THE PURPOSE OF THIS RESISTOR IS TO LOAD THE CHANNEL YELLOW MONITOR INPUT IN ORDER TO PREVENT THE SIGNAL SEQUENCE MONITOR FROM DETECTING ANY POSSIBLE "PHANTOM" OR FALSE CONFLICT, AS THIS CHANNEL HAS NO YELLOW FIELD DISPLAY.

PREEMPT ONLY PHASE OMIT NOTE

(program controller as shown below)

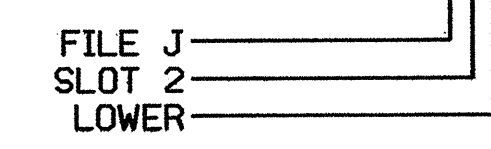
FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). PROGRAM PHASE 3 FOR 'OMIT PHASE' AND PHASES 1, 2, 4, 5, 6, 7 AND 8 FOR 'STARTUP CALLS'. THIS IS TO PREVENT PHASE 3 FROM BEING SERVED WHEN NOT IN PREEMPT.

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			
2A,2B	TB2-9,10	I3U	63	25	32	2	Y	Y		1.8	
2C,2D	TB2-11,12	I3L	76	38	42	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			10
	TB3-5,6	J2U	40	2	6	5	Y	Y			15
5A ²	TB3-7,8	J2L	44	6	16	2	Y	Y			
	TB3-9,10	J3U	64	26	36	6	Y	Y		1.8	
6A,6B	TB3-11,12	J3L	77	39	46	6	Y	Y			
6C,6D	TB5-9,10	J6U	42	4	8	7	Y	Y			15
7A ³	TB5-11,12	J6L	46	8	18	4	Y	Y			3
	TB7-1,2	J7U	66	28	38	8	Y	Y			10

- ADD JUMPERS FROM TB2-5 TO TB2-7, AND FROM TB2-6 TO TB2-8.
- ADD JUMPERS FROM TB3-5 TO TB3-7, AND FROM TB3-6 TO TB3-8.
- ADD JUMPERS FROM TB5-9 TO TB5-11, AND FROM TB5-10 TO TB5-12.

INPUT FILE POSITION LEGEND:



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-0012
DESIGNED: February 2005
SEALED: 3/14/05
REVISED:

SIGNAL UPGRADE - SHEET 1 OF 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

NC 274 (BESSEMER CITY ROAD)
AT
NC 275 (DALLAS-BESSEMER CITY ROAD)
AND SR 1312 (OATES ROAD)

DIVISION 12- GASTON COUNTY GASTONIA

PLAN DATE: MARCH 2005 REVIEWED BY: T. J. [Signature]

PREPARED BY: WILLIAM HAIRSTON REVIEWED BY:

REVISIONS INIT. DATE

122 N. McDowell St., Raleigh, NC 27603

Seal of the State of North Carolina, Professional Engineer, George C. Brown, No. 022013, dated 02/20/03.

Signature: [Signature] 4/1/05

SIG. INVENTORY NO. 12-0012