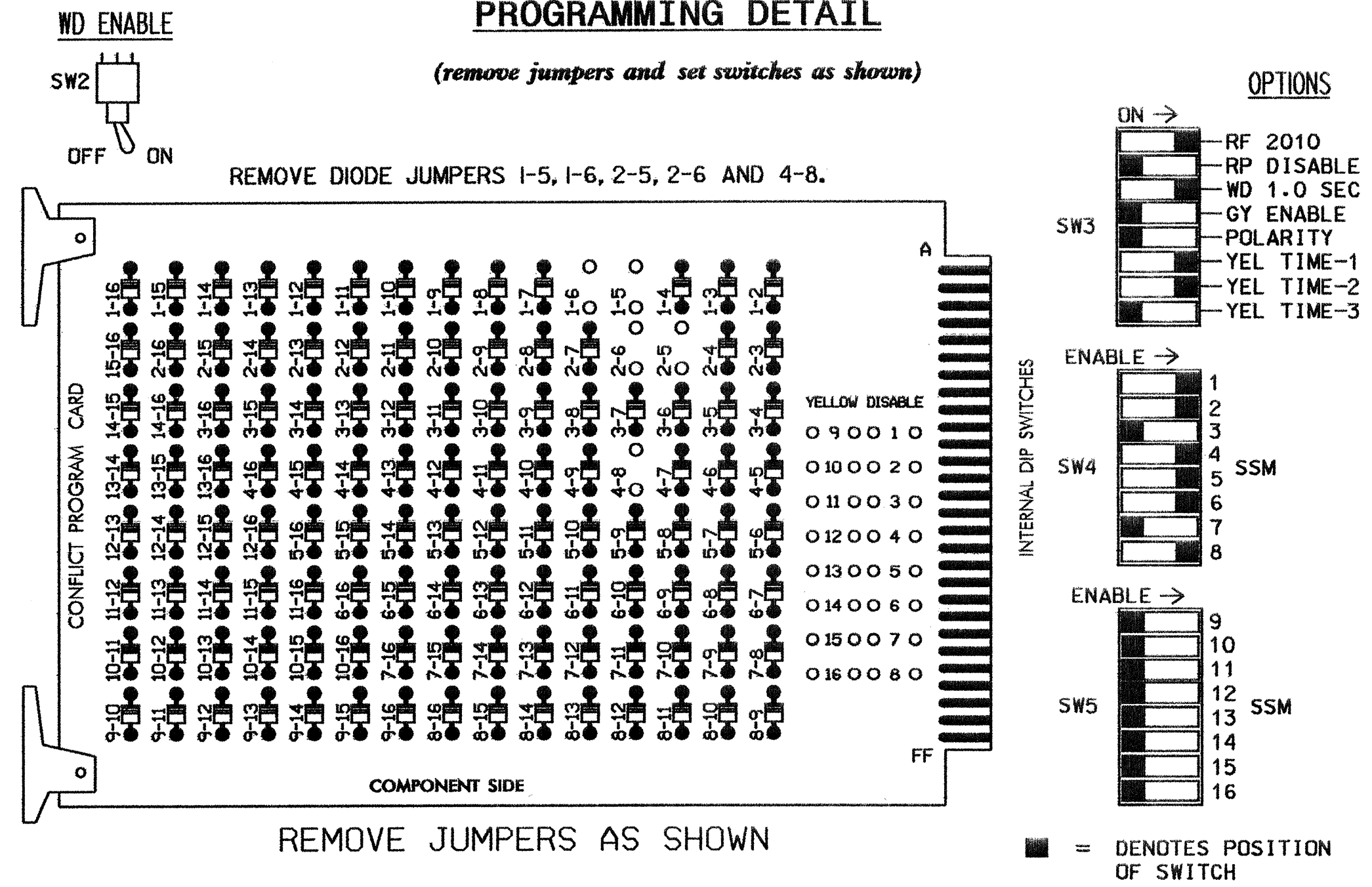


**EDI MODEL 2010ECL CONFLICT MONITOR**

**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 3,7,9,10, 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.

**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.	61,82	21 22,23	NU	NU	41 42,43	NU	21	61 62,63	NU	NU	81 82,83	NU
GREEN		130			103			136			109	
YELLOW		129			102			135			108	
RED	*	128			101		*	134			107	
RED ARROW												
YELLOW ARROW	126						132					
GREEN ARROW	127						133					

NU = NOT USED  
\* DENOTES INSTALL LOAD RESISTOR. SEE LOAD RESISTOR INSTALLATION DETAIL THIS PAGE.

**EQUIPMENT INFORMATION**

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

**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 AND 2.
- FROM PHASE CONTROL FUNCTIONS MENU PRESS '2' (DYNAMIC/BACKUP CONTROL FUNCTIONS).

DYNAMIC/BACKUP CONTROL FUNCTION #01  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE ;  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #02  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE ;  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

BACKUP PROTECTION PROGRAMMING COMPLETE

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 09-0708  
DESIGNED: JUNE 2004  
SEALED: 07/20/04  
REVISED:

**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	∅ 2	2C,2D	∅ 4	∅ 4	∅ 4	∅ 4	∅ 4	∅ 4	∅ 4	∅ 4	∅ 4	∅ 4
L	1A	2A	2B	NOT USED	4A	4B	4C	4D	4E	4F	4G	4H	4I	4J
U	∅ 5	∅ 6	∅ 6	6C,6D	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8
L	5A	6A	6B	NOT USED	8A	8B	8C	8D	8E	8F	8G	8H	8I	8J
U	∅ 2	∅ 6	∅ 6	NOT USED	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8	∅ 8
L	5A	6A	6B	NOT USED	8A	8B	8C	8D	8E	8F	8G	8H	8I	8J

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

FS = FLASH SENSE  
ST = STOP TIME

**INPUT FILE CONNECTION & PROGRAMMING CHART**

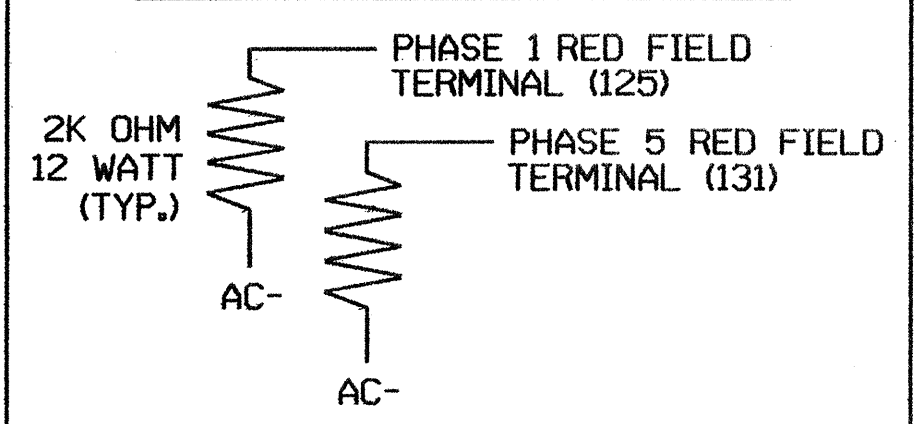
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A <sup>1</sup>	TB2-5,6	I2U	39	1	2	1	Y	Y			20
	TB2-7,8	I2L	43	5	12	6	Y	Y			
2A	TB2-9,10	I3U	63	25	32	2	Y	Y		2.3	
2B	TB2-11,12	I3L	76	38	42	2	Y	Y		2.3	
2C,2D	TB4-1,2	I4U	47	9	22	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			3
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			10
5A <sup>2</sup>	TB3-5,6	J2U	40	2	6	5	Y	Y			20
	TB3-7,8	J2L	44	6	16	2	Y	Y			
6A	TB3-9,10	J3U	64	26	36	6	Y	Y		2.3	
6B	TB3-11,12	J3L	77	39	46	6	Y	Y		2.3	
6C,6D	TB5-1,2	J4U	48	10	26	6	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			3
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			
8C	TB7-1,2	J7U	66	28	38	8	Y	Y			15

<sup>1</sup> ADD JUMPERS FROM TB2-5 TO TB2-7, AND FROM TB2-6 TO TB2-8.  
<sup>2</sup> ADD JUMPERS FROM TB3-5 TO TB3-7, AND FROM TB3-6 TO TB3-8.

INPUT FILE POSITION LEGEND: J2L

FILE J  
SLOT 2  
LOWER

**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.

**SIGNAL UPGRADE - FINAL**

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Office of:  
The Planning and Safety Department  
CITY OF CHARLOTTE  
222 N. McDowell St., Raleigh, NC 27603

**US 70 & NC 801 AT NC 801 & SR 1958**

DIVISION 09 ROWAN COUNTY S. OF BARBER

PLAN DATE: JULY 2004 REVIEWED BY: R. Kim Darr

PREPARED BY: JAMES PETERSON REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 022013  
GEORGE C. BROWN

Signature: George C. Brown 7/27/04  
DATE: 7/27/04  
SIG. INVENTORY NO. 09-0708