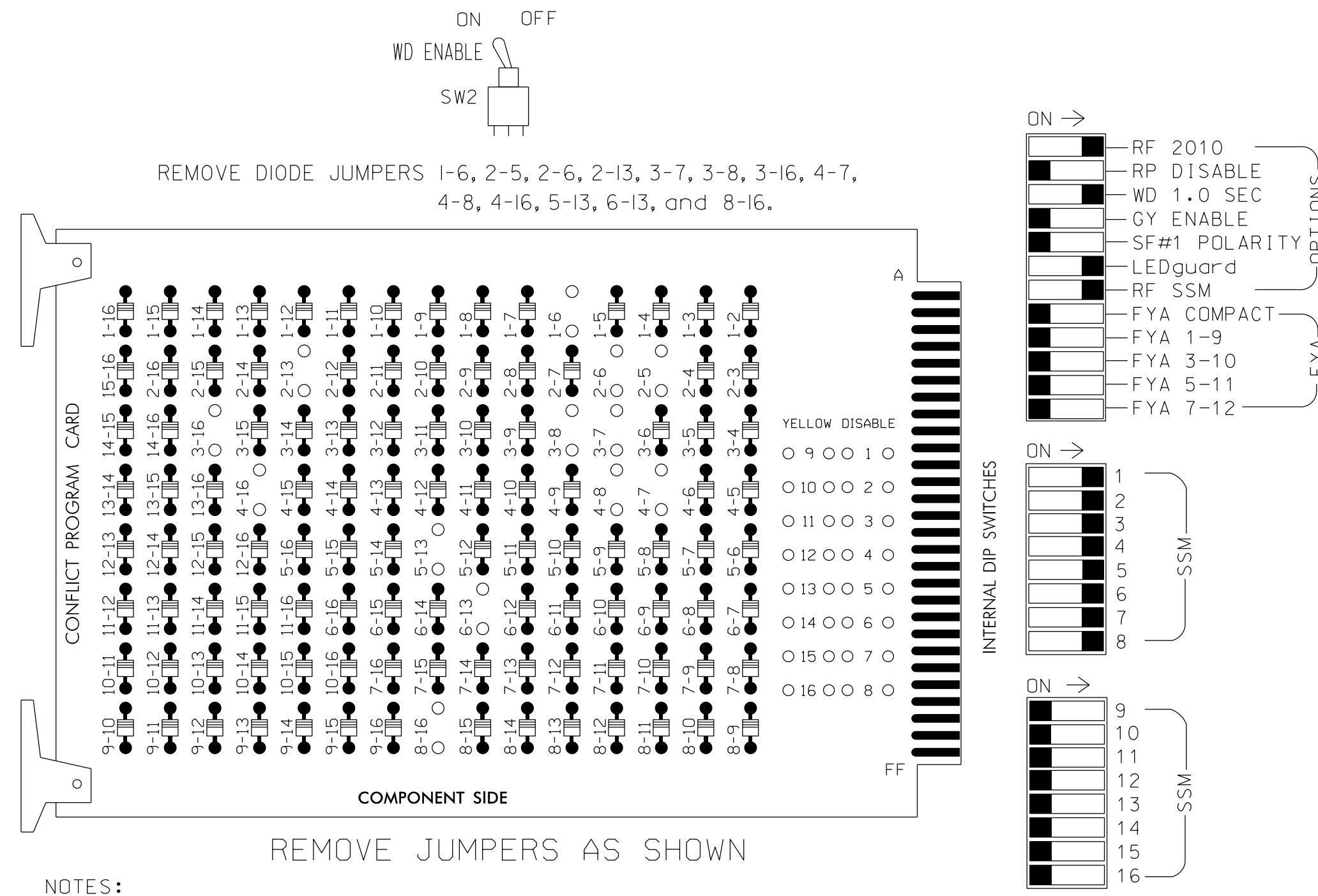


**EDI MODEL 2010ECL-NC CONFLICT MONITOR
PROGRAMMING DETAIL**

(remove jumpers and set switches as shown)



- NOTES:
- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
 - Make sure jumpers SEL2-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 used monitor channels, tie unused red monitor inputs 9,10, 11,12,13,14,15 & 16 to load switch AC+ per the cabinet manufacturer's instructions.
- Enable Simultaneous Gap-Out for all phases.
- Program phases 2 and 6 for Variable Initial and Gap Reduction.
- Program phases 2 and 6 for Start Up In Green.
- Program phases 2 and 8 for 'STARTUP PED CALL'.
- Program phases 2 and 6 for Yellow Flash.
- The cabinet and controller are part of the Oak Street Closed Loop System.

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5	S6	S6P	S7	S8	S8P	
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	
SIGNAL HEAD NO.	11	82	21,22	P21, P22	31,32	41,42 43	NU	51,52	61,62 63	NU	71	81,82 83	P81, P82
RED			128			101			134			107	
YELLOW			129			102			135			108	
GREEN			130			103			136			109	
RED ARROW	125					116			131			122	
YELLOW ARROW	126	126				117			132			123	
GREEN ARROW	127	127				118			133			124	
						113						110	
						115						112	

NU = Not Used

EQUIPMENT INFORMATION

CONTROLLER.....2070
 CABINET.....332
 SOFTWARE.....ECONOLITE OASIS
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...12
 LOAD SWITCHES USED.....S1,S2,S2P,S3,S4,S5,S6,S7,S8,S8P
 PHASES USED.....1,2,2PED,3,4,5,6,7,8,8PED
 OVERLAPS.....NONE

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

INPUT FILE POSITION LAYOUT

(front view)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	∅ 1	∅ 2	∅ S	∅ S	∅ S	∅ 3	∅ 4	∅ S	SYS. DET. S1	∅ S	∅ S	∅ 2 PED DC ISOLATOR	NOT USED	FS DC ISOLATOR
	NOT USED	∅ 2	∅ 2	∅ 2	∅ 2	∅ 3	∅ 4	∅ S	SYS. DET. S2	∅ S	∅ S	∅ 8 PED DC ISOLATOR	DC ISOLATOR	DC ISOLATOR
FILE "J"	∅ 5	∅ 5	∅ 6	∅ S	∅ 7	∅ 8	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S
	5A	5B	6B	∅ S	7A	8A	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S
	NOT USED	∅ 6	NOT USED	∅ S	NOT USED	∅ 1	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S
	6A	6A	6A	∅ S	1B	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S	∅ S

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

FS = FLASH SENSE
ST = STOP TIME

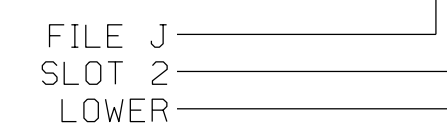
INPUT FILE CONNECTION & PROGRAMMING CHART

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	TB2-1,2	I1U	56	18	1	1	Y	Y			15
1B	TB5-11,12	J6L	46	8	18	1	Y	Y			
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
3A	TB4-9,10	I6U	41	3	4	3	Y	Y			
3B	TB4-11,12	I6L	45	7	14	3	Y	Y			
4A	TB6-1,2	I7U	65	27	34	4		Y		2.4	
4B	TB6-3,4	I7L	78	40	44	4	Y	Y			
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			
5B	TB3-5,6	J2U	40	2	6	5	Y	Y			
6A	TB3-7,8	J2L	44	6	16	6	Y	Y			
6B	TB3-9,10	J3U	64	26	36	6	Y	Y			
7A	TB5-5,6	J5U	57	19	7	7	Y	Y			3
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
* S1	TB6-9,10	I9U	60	22	11	SYS					
* S2	TB6-11,12	I9L	62	24	13	SYS					
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2 PED					
P81,P82	TB8-8,9	I13L	70	32	PED 8	8 PED					

NOTE: INSTALL DC ISOLATOR IN INPUT FILE SLOTS 112 AND 113.

* System detector only. Remove the vehicle phase assigned to this detector in the default programming.

INPUT FILE POSITION LEGEND: J2L



PHASE SEQUENCE PROGRAMMING DETAIL

(program controller as shown below)

FROM OASIS LOCAL CONTROLLER MAIN MENU
SELECT: 4 PHASE SEQUENCE

PHASE SEQUENCE: PAGE 1 NEXT: PAGES)

RNG	LEAD	BARRIER 1	X-LAG	LEAD	BARRIER 2	X-LAG
1	1	2	0	0	4	0
2	0	6	0	5	7	8
3	0	0	0	0	0	0
4	0	0	0	0	0	0

NC Dept of Transportation
Division of Highways

Final Drawing Date: 1/12/2018

DocuSigned by:
R. N. Zinner
F1388973472248F

ITS & Signals Unit

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 13-0143
DESIGNED: Dec. 2017
SEALED: 12/15/2017
REVISED: N/A

Electrical Detail

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

US 74 Alternate at SR 2241 (Oak Street)/ SR 2241 (Oak Street Extension)

Division 13 Rutherford County Forest City

Prepared for the Offices of:
North Carolina Department of Transportation
Office of Transportation Management & Signal Management

PLAN DATE: Dec. 2017 REVIEWED BY: J.L. Lewis
PREPARED BY: J. Ma VHB PROJECT NO.: 38536.09

REVISIONS INIT. DATE

Signature: *Jianxin Ma* DATE: 2017.12.15

SIG. INVENTORY NO. 13-0143



12/15/2017
www.vhb.com
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