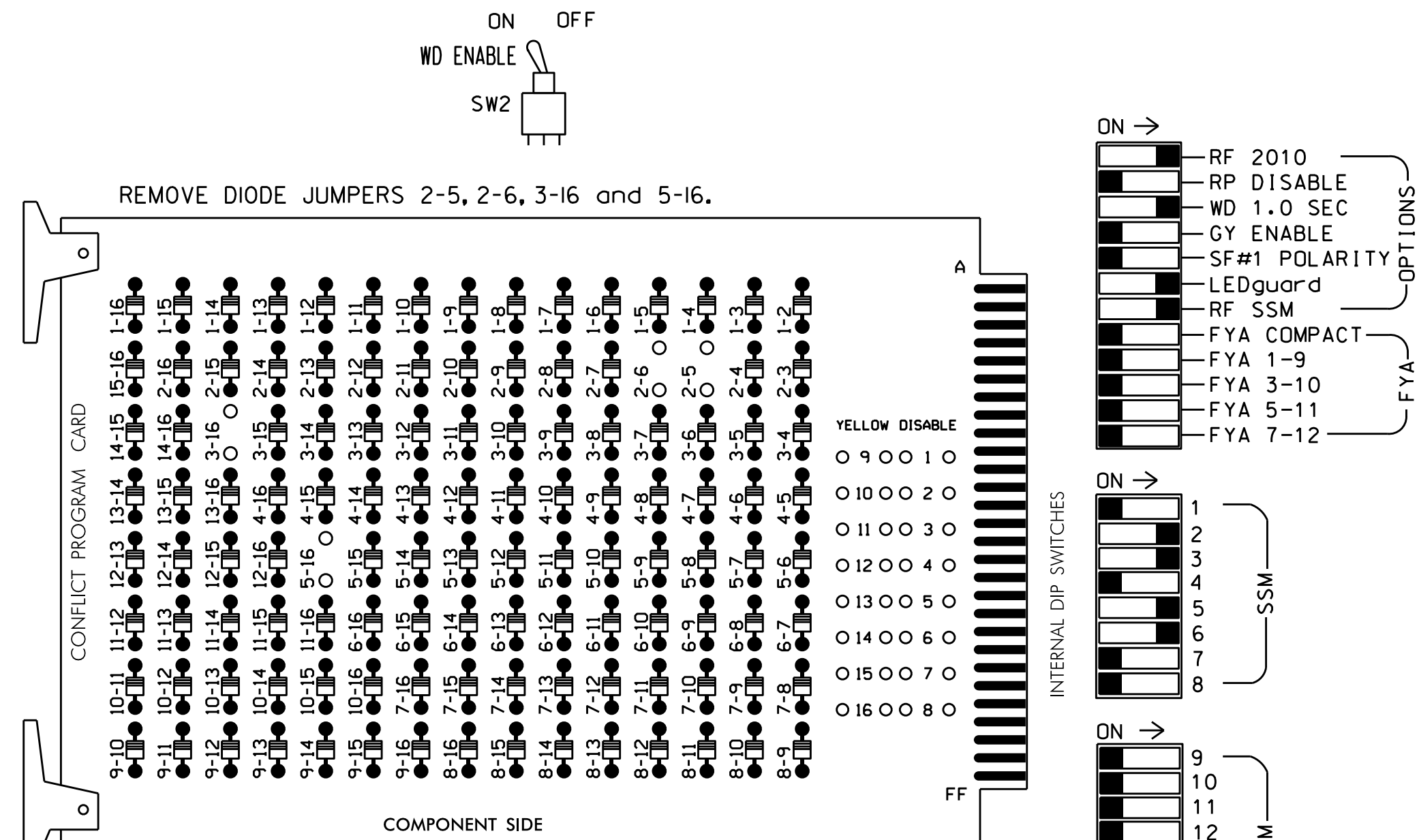


**EDI MODEL 2010ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL**

(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 unused monitor channels, tie unused red monitor inputs 1,4,7,8,9,10,11,12,13,14,15 & 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 phase 8 for 'STARTUP PED CALL'.
- Program phases 2 and 6 for Yellow Flash.
- The cabinet and controller are part of the Wilmington Signal System.

**EQUIPMENT INFORMATION**

CONTROLLER.....2070  
 CABINET.....332  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...12  
 LOAD SWITCHES USED.....S2,S3,S5,S6,S8P  
 PHASES USED.....2,3,4\*,5,6,8\*,8 PED  
 OVERLAP A.....4+5  
 \* Phase used for timing purposes only.

**SIGNAL HEAD 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	OLA	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	NU	21, 22,23	NU	31,32	NC	NU	21,32	61,62, 63,64	NU	NU	NC	P81, P82
RED		128		116			*	134				
YELLOW		129		117				135				
GREEN		130		118				136				
RED ARROW												
YELLOW ARROW							132					
GREEN ARROW							133					
Hand												110
Person												112

NU = Not Used

NC = No Connection, phase used for timing purposes only.

\* Denotes install load resistor. See load resistor installation detail this sheet.

**INPUT FILE POSITION LAYOUT (front view)**

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅2	∅2	∅2	∅3	∅3	∅3	∅3	∅3	SYS. DET. S1	∅3	∅3	∅3	∅3	FS
L	2A	2C	2B	NOT USED	3A	NOT USED	NOT USED	NOT USED	SYS. DET. S2	NOT USED	NOT USED	NOT USED	NOT USED	DC ISOLATOR
U	∅5	∅5	∅6	∅6	∅6	∅6	∅6	∅6	SYS. DET. S3	∅6	∅6	∅6	∅6	ST
L	5A	5B	6B	6D	6A	6C	NOT USED	NOT USED	SPEC DET **	NOT USED	NOT USED	NOT USED	NOT USED	DC ISOLATOR

EX.: 1A, 2A, ETC. = LOOP NO.'S  
 FS = FLASH SENSE  
 ST = STOP TIME  
 \* Wired Input - Do not populate slot with detector card  
 \*\* Loop 5A has a "Special Function" used by the Logical I/O Processor. Turn off Channel 2 on this detector card. See sheet 2 for details.

**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
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
2C	TB2-9,10	I3U	63	25	32	2	Y	Y			
3A	TB4-5,6	I5U	58	20	3	3	Y	Y			2
5A'	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9	22	2	Y	Y	Y		3
	-	J9L	61	23	17★	5	Y	Y			
5B	TB3-5,6	J2U	40	2	6	5	Y	Y			15
6A	TB3-7,8	J2L	44	6	16	6	Y	Y			
6B	TB3-9,10	J3U	64	26	36	6	Y	Y			
6C	TB3-11,12	J3L	77	39	46	6	Y	Y			
6D	TB5-1,2	J4U	48	10	26	6	Y	Y	Y		3
* S1	TB6-9,10	I9U	60	22	11	SYS					
* S2	TB6-11,12	I9L	62	24	13	SYS					
* S3	TB7-9,10	J9U	59	21	15	SYS					
PED PUSH BUTTONS											
P81,P82	TB8-8,9	I13L	70	32		PED 8	8 PED				

NOTE:  
 INSTALL DC ISOLATOR IN INPUT FILE SLOT 113.

1 Add jumper from J1-W to I4-W, on rear of input file.

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

★ Detector 17 (INPUT 23) is a "virtual" detector used by the Logical I/O Processor. See sheet 2 for details.

**BACKUP PROTECTION NOTE**

(program controller as shown below)

From Main Menu press '2' (Phase Control), then '1' (Phase Control Functions). Program phase 2 for 'Backup Protect'. Make sure the Red Revert times shown on the Signal Design Plans are programmed in the 'Phase Timing' menu.

**COUNTDOWN PEDESTRIAN SIGNAL OPERATION**

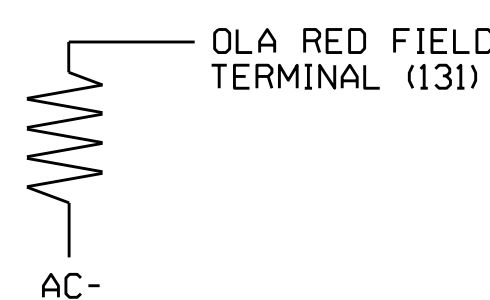
Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0236  
 DESIGNED: September 2015  
 SEALED: 10/21/2015  
 REVISED: N/A

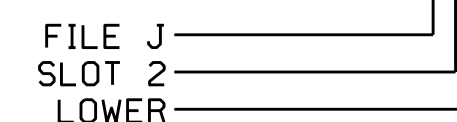
**LOAD RESISTOR INSTALLATION DETAIL**

(install resistor as shown below)

ACCEPTABLE VALUES	VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)	
2.0K - 3.0K	10W (min)	



**INPUT FILE POSITION LEGEND: J2L**



Electrical Detail - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR: US 117-NC 132 (S. College Rd.) at University Drive

Prepared in the Offices of: [Logo] PROFESSIONAL ENGINEER

Division 3 New Hanover County Wilmington

PLAN DATE: October 2015 REVIEWED BY: T. Joyce

PREPARED BY: S. Armstrong REVIEWED BY:

REVISIONS INIT. DATE

DocuSigned by: Keith M. Minns 10/27/2015

750 N. Greenfield Pkwy, Garner, NC 27529

SIG. INVENTORY NO. 03-0236