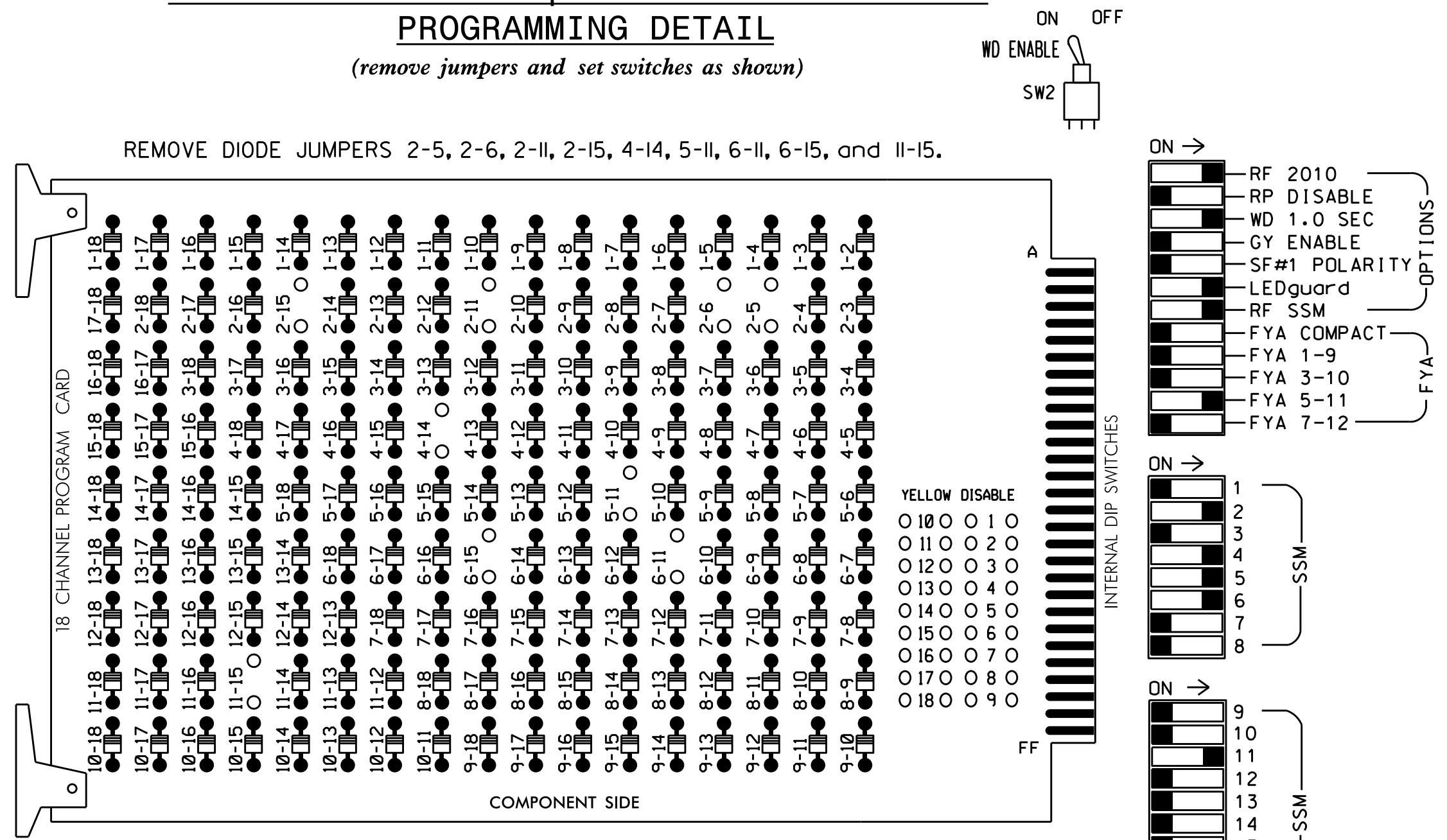


**EDI MODEL 2018EClip-NC CONFLICT MONITOR PROGRAMMING DETAIL**  
(remove jumpers and set switches as shown)



- NOTES:**
- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
  - Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
  - Ensure that Red Enable is active at all times during normal operation.
  - Ensure Conflicte Monitor Ethernet port is connected to a Switch port located within the cabinet.

**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.
- Initialize database in Naztec 2070 local software (Apogee) as FULL-MODE 5. This initialization should be done prior to programming controller.
- Program phase 2 for Start Up In Green, and phase 6 for Start Up In Walk.
- Program "Start Up Flash" for 0 sec. The conflict monitor will govern start-up flash time.
- Ensure "Local Flash Start" feature is set to "ON".
- The cabinet and controller are part of the City of Greensboro Signal System.

**SIGNAL HEAD HOOK-UP CHART**

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OLA	DLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	NU	41,42	P41,P42 P43,P44	42	51*	61,62	P61, P62	NU	NU	NU	NU	NU	51*	NU	NU
RED		128			101		*		134									
YELLOW		129			102				135									
GREEN		130			103				136									
RED ARROW																		A114
YELLOW ARROW								132										A115
FLASHING YELLOW ARROW																		A116
GREEN ARROW							133	133										
Hand							104			119								
Walker							106			121								

NU = Not Used  
\* Denotes install load resistor. See load resistor installation detail this sheet.  
\* See pictorial of head wiring in detail below.

**EQUIPMENT INFORMATION**

CONTROLLER.....2070  
CABINET.....332 W/ AUX  
SOFTWARE.....NAZTEC APOGEE  
CABINET MOUNT.....BASE  
OUTPUT FILE POSITIONS...18 (12-STD, 6-AUX)  
LOAD SWITCHES USED.....S2,S5,S6,S7,S8,S9,AUX S4  
PHASES USED.....2,4,4PED,5,6,6PED  
OVERLAP A.....NOT USED  
OVERLAP B.....NOT USED  
OVERLAP C.....\*  
OVERLAP D.....NOT USED

\* SEE OVERLAP PROGRAMMING DETAIL SHEET 2

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

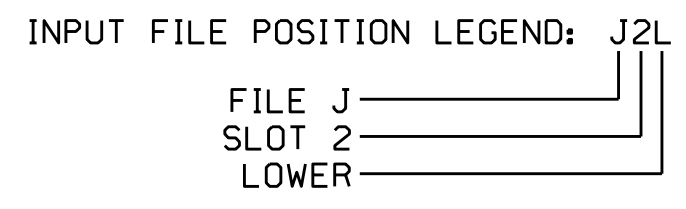
FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅5	∅5	∅5	∅5	∅5	∅4	∅5	∅5	∅5	∅5	∅5	∅5	∅5	∅5
L	5A	5B	∅5	∅5	∅5	4A	∅5	∅5	∅5	∅5	∅5	∅5	∅5	∅5
U	NOT USED	∅6	∅5	∅5	∅5	NOT USED	∅5	∅5	∅5	∅5	∅5	∅5	∅5	∅5
L	6A	∅6	∅5	∅5	∅5	NOT USED	∅5	∅5	∅5	∅5	∅5	∅5	∅5	∅5

EX. : 1A, 2A, ETC. = LOOP NO.'S  
FS = FLASH SENSE  
ST = STOP TIME

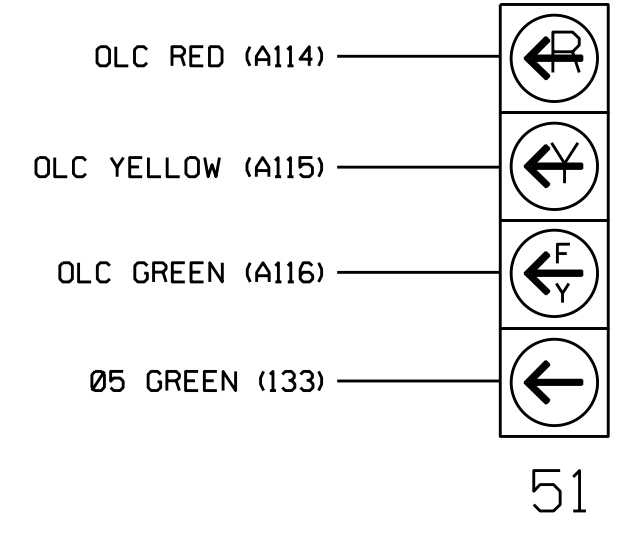
**INPUT FILE CONNECTION & PROGRAMMING CHART**

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	DETECTOR NO.	CALL PHASE	SWITCH	DELAY TIME	EXTEND TIME	CALL	EXTEND	ADDED INIT.
4A	TB4-9,10	I6U	41	8	4		3		X	X	
5A	TB3-1,2	J1U	55	15	5		15		X	X	
5B	TB3-5,6	J2U	40	16	5		15		X	X	
6A	TB3-7,8	J2L	44	17	6				X	X	X
PED PUSH BUTTONS											
P41,P42 P43,P44	TB8-5,6	I12L	69	PED 4	4 PED						
P61,P62	TB8-7,9	I13U	68	PED 6	6 PED						

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



**FYA SIGNAL WIRING DETAIL**  
(wire signal head as shown)



**COUNTDOWN PEDESTRIAN SIGNAL OPERATION**

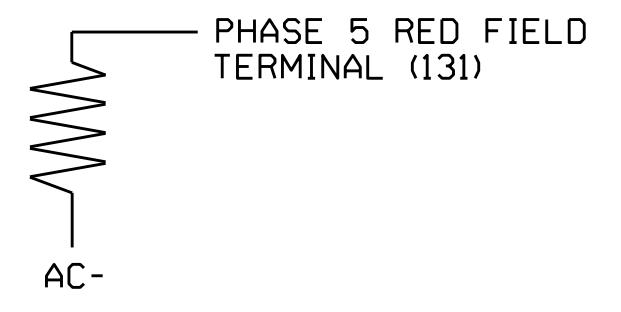
Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: GBO-007  
DESIGNED: April 2016  
SEALED: 5/2/2016  
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)



**SPECIAL DETECTOR NOTE**

For detection zone 2A, install a microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

Signal Upgrade - Sheet 1 of 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:  
TRANSPORTATION MOBILITY AND SAFETY  
DIVISION OF NORTH CAROLINA  
Signal Management Section  
750 N. Greenfield Pkwy, Garner, NC 27529

DETAILS FOR: Lake Brandt Rd/Cotswold Ave at Old Battleground Road

Division 7 Guilford County Greensboro

PLAN DATE: April 2016 REVIEWED BY: BAS

PREPARED BY: S. Armstrong REVIEWED BY:

REVISIONS INIT. DATE

Seal: KEITH M. MIMS, ENGINEER, 036880

DocuSigned by: Keith M. Mims 5/3/2016

SIG. INVENTORY NO. GBO-007

02-MAY-2016 16:57  
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