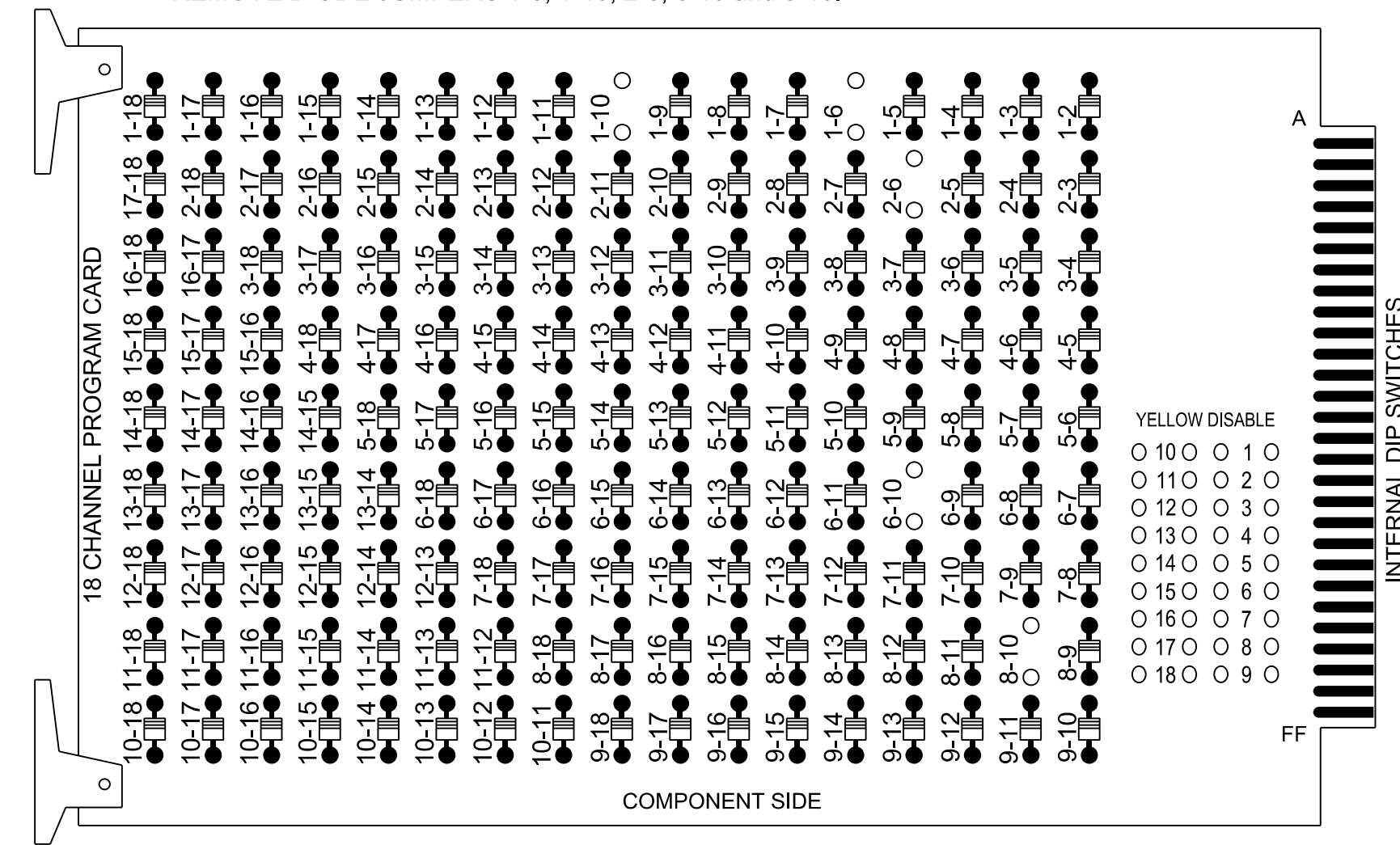


### 18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

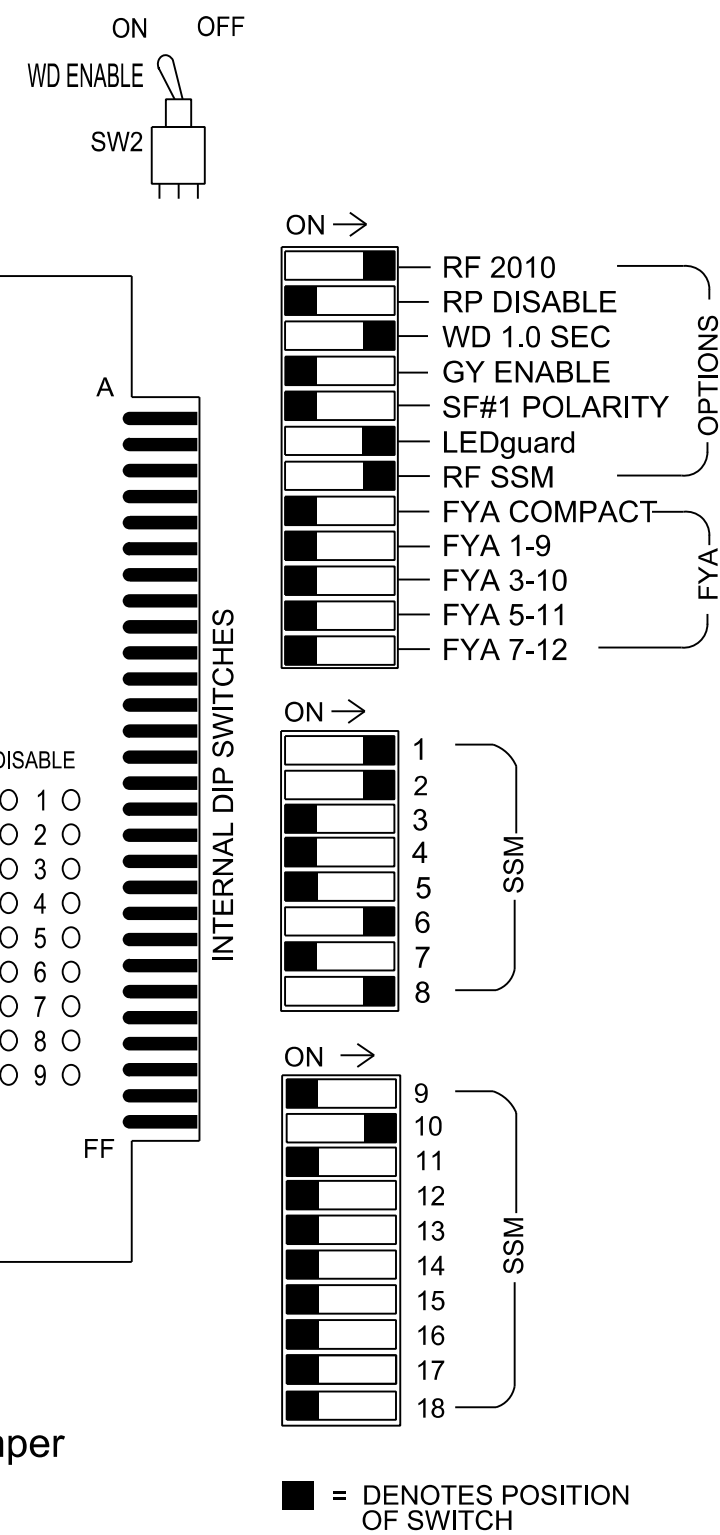
REMOVE DIODE JUMPERS 1-6, 1-10, 2-6, 6-10 and 8-10.



REMOVE JUMPERS AS SHOWN

#### NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Integrate monitor with Ethernet network in cabinet.



### NOTES

1. 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 plan.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
4. The cabinet and controller are part of the US 158 Signal System, Signal System:D09-11\_Winston-Salem System.

### EQUIPMENT INFORMATION

Controller.....2070LX  
 Cabinet.....332 w/ Aux  
 Software.....Q-Free MAXTIME  
 Cabinet Mount.....Base  
 Output File Positions.....18 With Aux. Output File  
 Load Switches Used.....S1, S2, S8, S11, AUX S2  
 Phases Used.....1, 2, 6, 8  
 Overlap "1".....NOT USED  
 Overlap "2".....\*  
 Overlap "3".....NOT USED  
 Overlap "4".....NOT USED  
 \*See overlap programming detail this sheet.

### 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	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11,12	21	22	NU	NU	NU	NU	61,62	NU	NU	82	NU	NU	13	NU	NU	NU	NU
RED		128	128						134		107				A124			
YELLOW		129	129						135									
GREEN			130						136									
RED ARROW	125																	
YELLOW ARROW	126										108				A125			
GREEN ARROW	127	130									109				A126			

NU = Not Used

### INPUT FILE CONNECTION & PROGRAMMING CHART

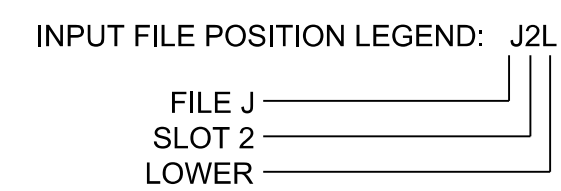
### INPUT FILE POSITION LAYOUT

(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
U	∅ 1	∅ 1	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	FS
L	1C	1A	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	DC ISOLATOR
L	NOT USED	∅ 1	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	ST
U	-O-S	-O-S	-O-S	-O-S	-O-S	NOT USED	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	DC ISOLATOR
L	-O-S	-O-S	-O-S	-O-S	-O-S	∅ 8	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	
L	-O-S	-O-S	-O-S	-O-S	-O-S	8B	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	-O-S	

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

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
1A	TB2-5,6	I2U	39	1	2	1			X		X	
1B	TB2-7,8	I2L	43	5	3	1			X		X	
1C	TB2-1,2	I1U	56	18	1	1	15		X		X	
8B	TB5-11,12	J6L	46	8	23	8			X		X	



### OVERLAP PROGRAMMING

Front Panel  
 Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface  
 Home >Controller >Overlap Configuration >Overlaps  
 Overlap Plan 1

Overlap	2
Type	Normal
Included Phases	1,8
Modifier Phases	-
Modifier Overlaps	-
Trail Green	0
Trail Yellow	0.0
Trail Red	0.0

### FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
2. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
3. REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

### SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection for zones 2A, 2B and 6A. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 09-0510T2  
 DESIGNED: February 2024  
 SEALED: February 12, 2024  
 REVISED:

Signal Upgrade - Temporary Design 2 (TMP Phase 1 Step 3) Electrical Detail

<p>Electrical and Programming Details For:</p> <p>Prepared for the Offices of:</p> <p>750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p><b>US 158 (Reidsville Rd.)</b> at <b>NC 74 Eastbound Ramps</b></p> <p>Division 9 Forsyth County Winston-Salem</p> <p>PLAN DATE: February 2024 REVIEWED BY: DT Sears</p> <p>PREPARED BY: WP Erickson-Jones REVIEWED BY:</p> <p>REVISIONS INIT. DATE</p> <p>2/12/2024</p> <p>SIG. INVENTORY NO. 09-0510T2</p>	<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p> <p>SEAL                  NORTH CAROLINA PROFESSIONAL ENGINEER                  PORTER JONES                  SEAL 056142</p>
--	--	---