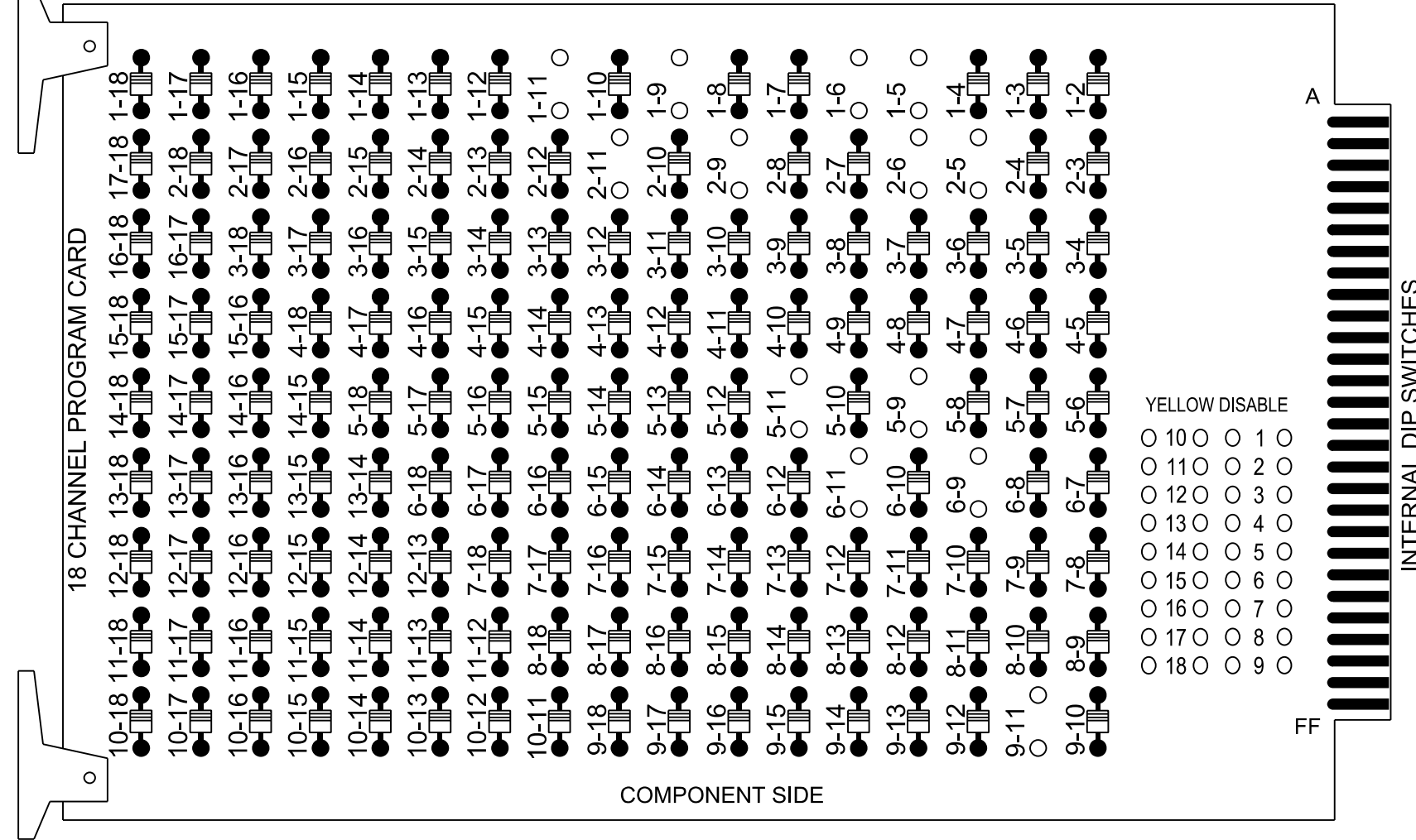


### 18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

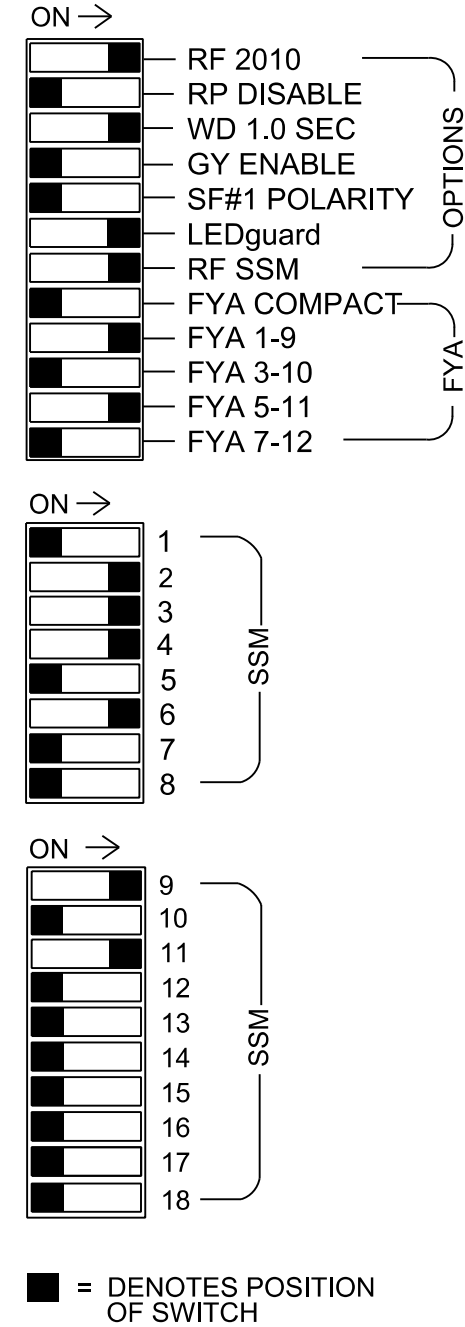
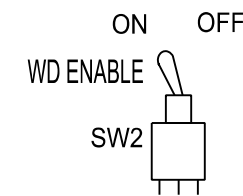
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 5-9, 5-11, 6-9, 6-11 and 9-11.



REMOVE JUMPERS 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 the Red Enable is active at all times during normal operation.
- Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.



### 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 plan.
- Return controller to Factory Defaults before programming per this electrical detail.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

### 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, S4, S5, S7, S8, AUX S1, AUX S4  
 Phases Used.....1, 2, 3, 4, 5, 6  
 Overlap "1".....\*  
 Overlap "2".....NOT USED  
 Overlap "3".....\*  
 Overlap "4".....NOT USED  
 \*See overlap programming detail on 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*	23,24	NU	31	32	41	42,43	NU	51*	61,62	NU	NU	NU	11*	NU	NU	51*	NU
RED		128		116	116	101	101			134								
YELLOW	*	129		117	117	102	102		*	135								
GREEN		130		118	118	103	103			136								
RED ARROW													A121				A114	
YELLOW ARROW													A122				A115	
FLASHING YELLOW ARROW													A123				A116	
GREEN ARROW	127			118		103				133								

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

### OVERLAP PROGRAMMING

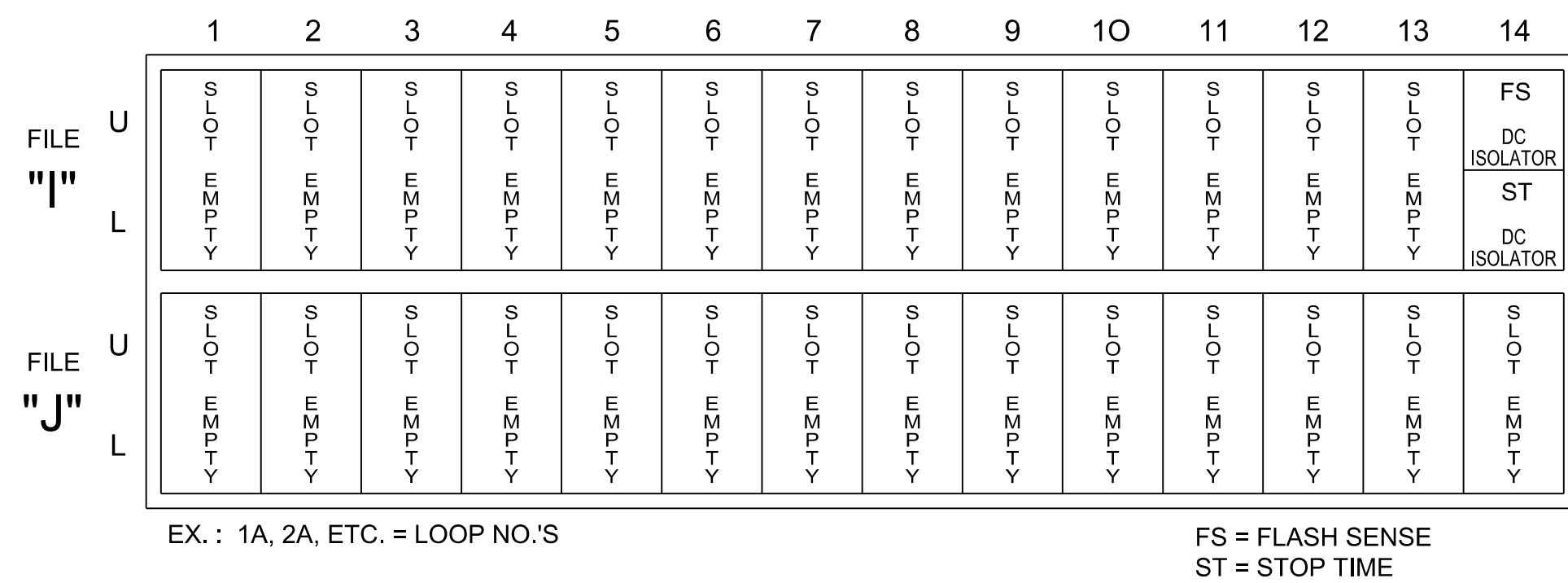
Front Panel  
 Main Menu > Controller > Overlap > Overlap Parameters/Overlap Timings

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

Overlap	1	3
Type	FYA 4 - Section	FYA 4 - Section
Included Phases	2	6
Modifier Phases	1	5
Modifier Overlaps	-	-
Trail Green	0	0
Trail Yellow	0.0	0.0
Trail Red	0.0	0.0

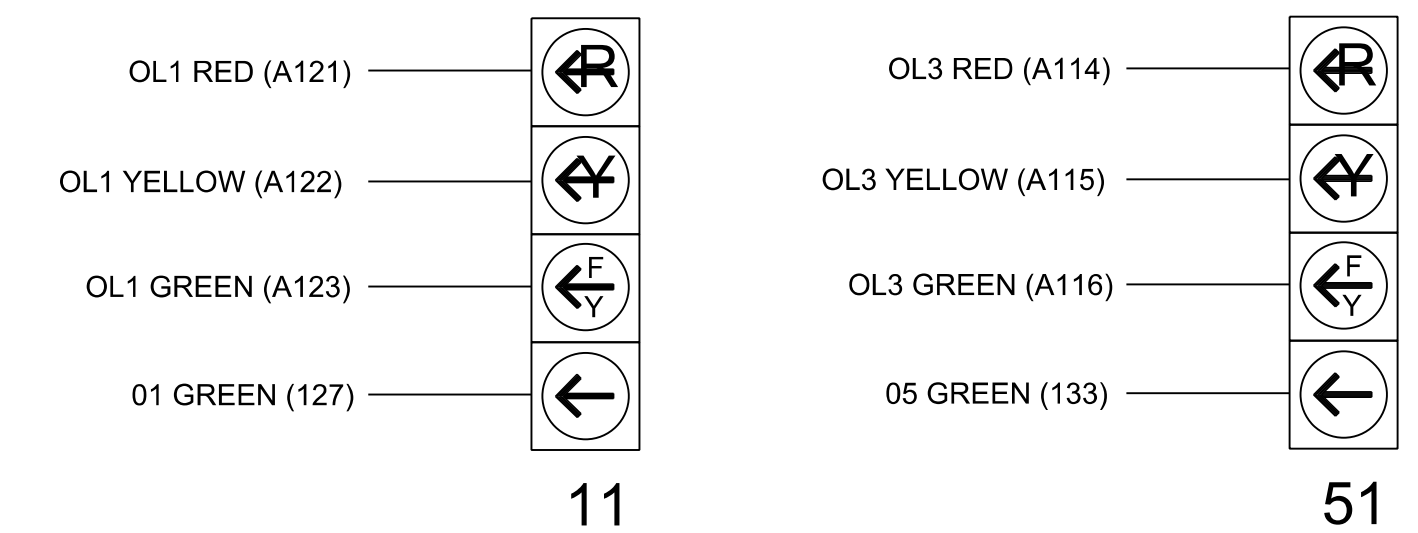
### INPUT FILE POSITION LAYOUT

(front view)



### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



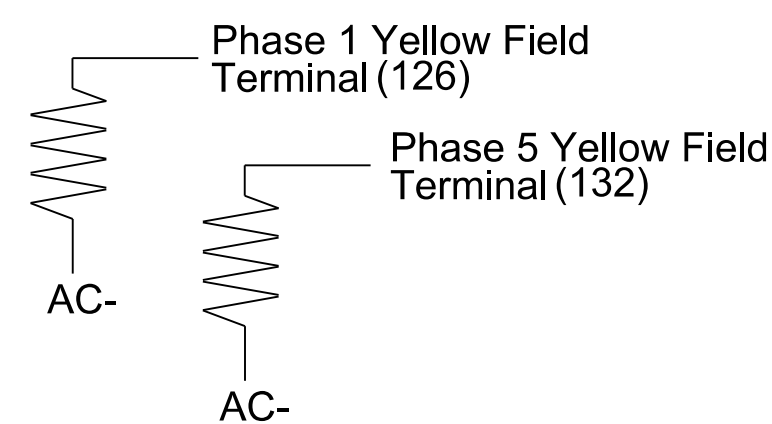
### SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection for zones. 1A, 2A, 3A, 3B, 3C, 4A, 5A 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.

### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 09-1100T3  
 DESIGNED: February 2024  
 SEALED: February 12, 2024  
 REVISED:

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

Electrical and Programming Details For: Prepared for the Offices of: 	US 158 (Reidsville Rd.) at SR 2014 (Vance Rd.)/ SR 1965 (Belevs Creek Rd.)		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL NORTH CAROLINA PROFESSIONAL ENGINEER PORTER JONES SEAL 056142 DocuSigned by Porter Jones 2/12/2024 DATE SIG. INVENTORY NO. 09-1100T3
	Division 9 PLAN DATE: February 2024 PREPARED BY: WP Erickson-Jones	Forsyth County Walkertown REVIEWED BY: DT Sears REVIEWED BY:	

**RK&K**  
 P: (919) 878-9550  
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965  
 NC License No. F-0112  
 Engineers | Construction Managers | Planners | Scientists  
 www.rk.com  
 Responsive People | Creative Solutions