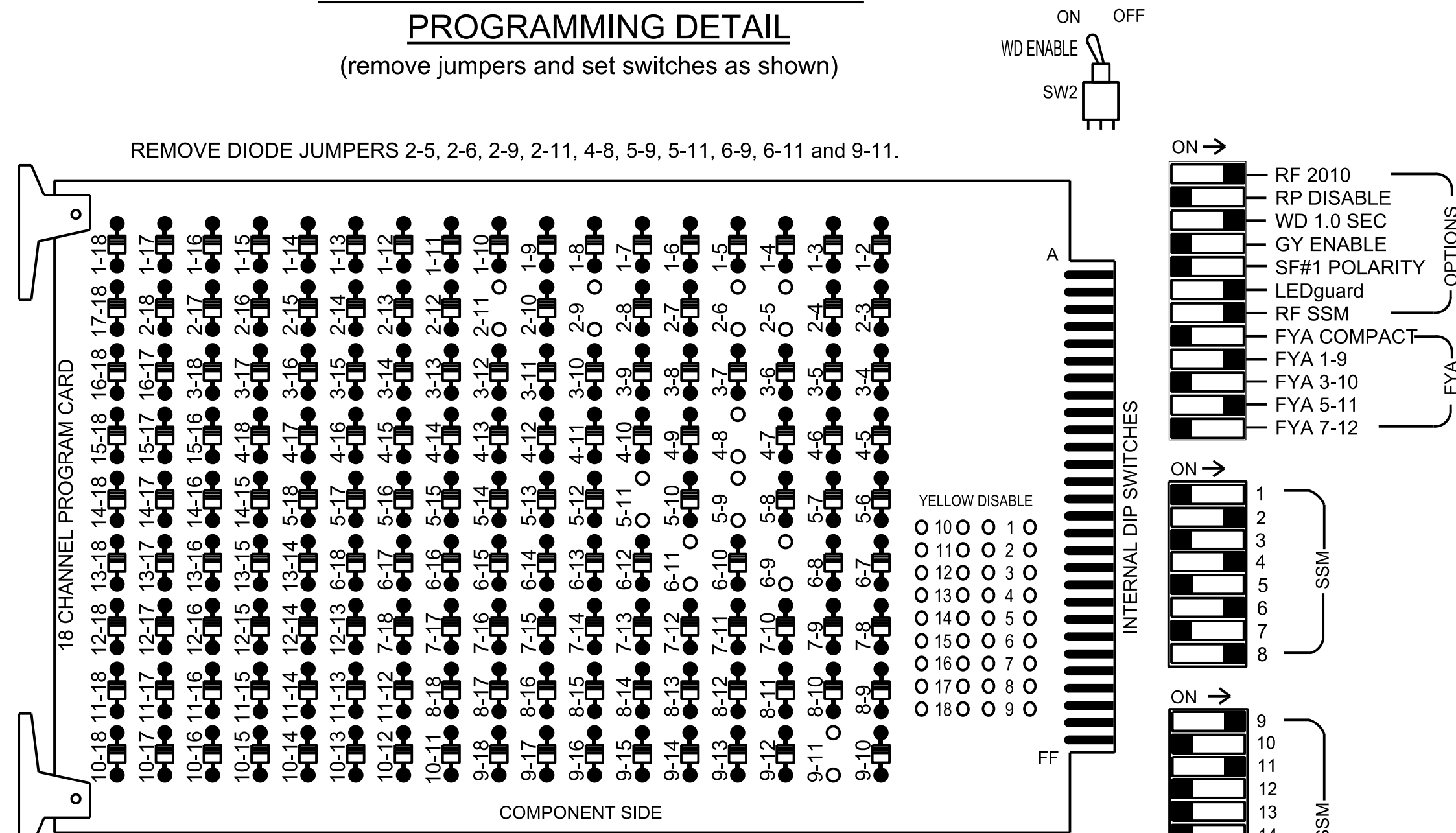


**18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL**  
(remove jumpers and set switches as shown)



**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 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.
- Program phases 4 and 8 for Dual Entry.
- 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.....S2, S5, S7, S8, S11, AUX S1, AUX S4  
 Phases Used.....2, 4, 5, 6, 8  
 Overlap "1".....\*  
 Overlap "2".....NOT USED  
 Overlap "3".....\*  
 Overlap "4".....NOT USED

\*See overlap programming detail on sheet 2

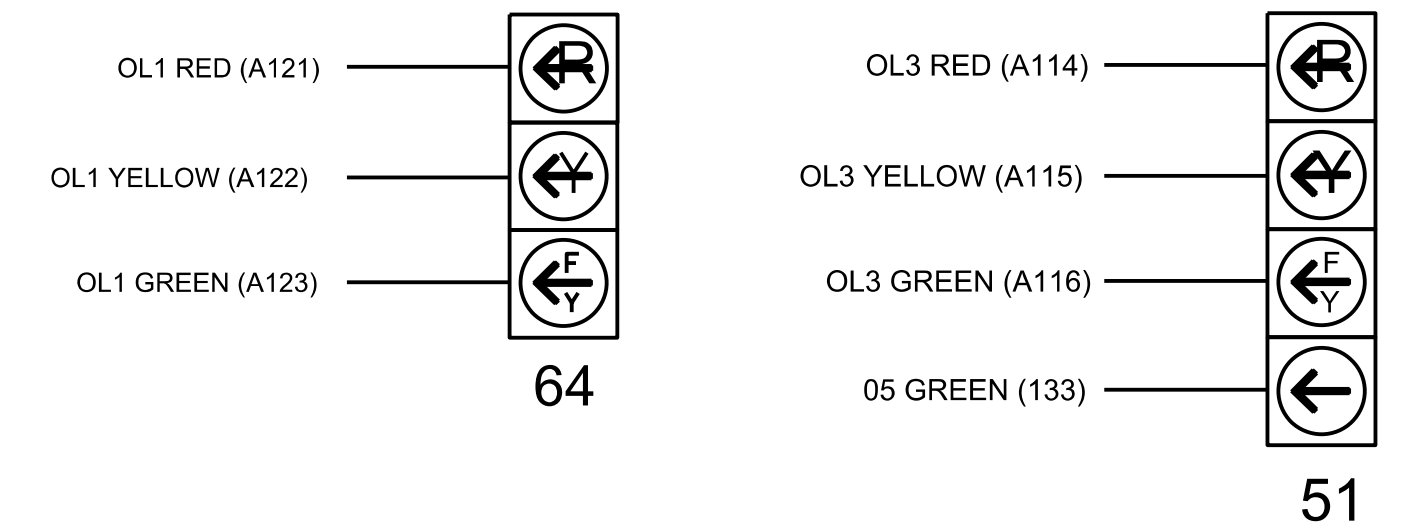
**SIGNAL HEAD HOOK-UP CHART**

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.	NU	21,22,23	NU	NU	41,42,43	NU	51	61,62	NU	NU	81,82	NU	64	NU	NU	51	NU	NU
RED		128			101			134			107							
YELLOW		129			102		*	135			108							
GREEN		130			103			136			109							
RED ARROW													A121				A114	
YELLOW ARROW													A122				A115	
FLASHING YELLOW ARROW													A123				A116	
GREEN ARROW								133										

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

**FYA SIGNAL WIRING DETAIL**

(wire signal heads as shown)



**INPUT FILE POSITION LAYOUT**

(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	S	S	S	S	S	S	S	S	S	S	S	S	S	FS
L	I	I	I	I	I	I	I	I	I	I	I	I	I	DC ISOLATOR
U	5	S	S	S	S	S	S	S	S	S	S	S	S	S
L	NOT USED	S	S	S	S	S	S	S	S	S	S	S	S	S

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

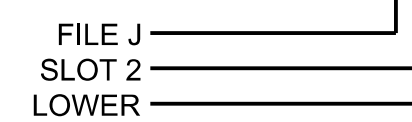
FS = FLASH SENSE  
 ST = STOP TIME

**INPUT FILE CONNECTION & PROGRAMMING CHART**

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
5A	TB3-12	J1U	55	17	15 *	5	15.0		X		X	
				-	31 *	2			X		X	

\* For the detectors to work as shown on the signal design plan see the Vehicle Detector Setup Programming Detail for Alternate phasing on sheet 2 of 3

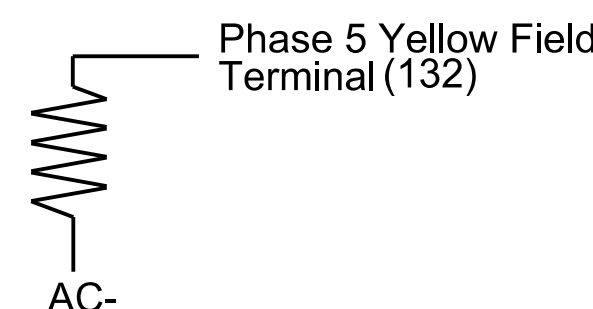
INPUT FILE POSITION LEGEND: J2L



**LOAD RESISTOR INSTALLATION DETAIL**

(install resistors as shown)

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



**SPECIAL DETECTOR NOTES**

- Install a video 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.
- For loop 5A, detector card placement is typical for a NCDOT installation. Detectors associated with these slots are compatible with the Vehicle Detector Programming Detail located on sheet 2 of this electrical detail.

Electrical Detail - Sheet 1 of 3  
 Temporary Design 3 (TMP Phase I)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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NC 73-211/NC 211  
 at  
 NC 73/SR 1133 (Mode Rd)  
 Division 8 Moore County West End  
 PLAN DATE: June 2024 REVIEWED BY: R. Mullinax  
 PREPARED BY: LD Stouchko REVIEWED BY:  
 REVISIONS  
 INIT. DATE

SEAL  
  
 Lari D. Stouchko  
 DATE  
 SIG. INVENTORY NO. 08-009813