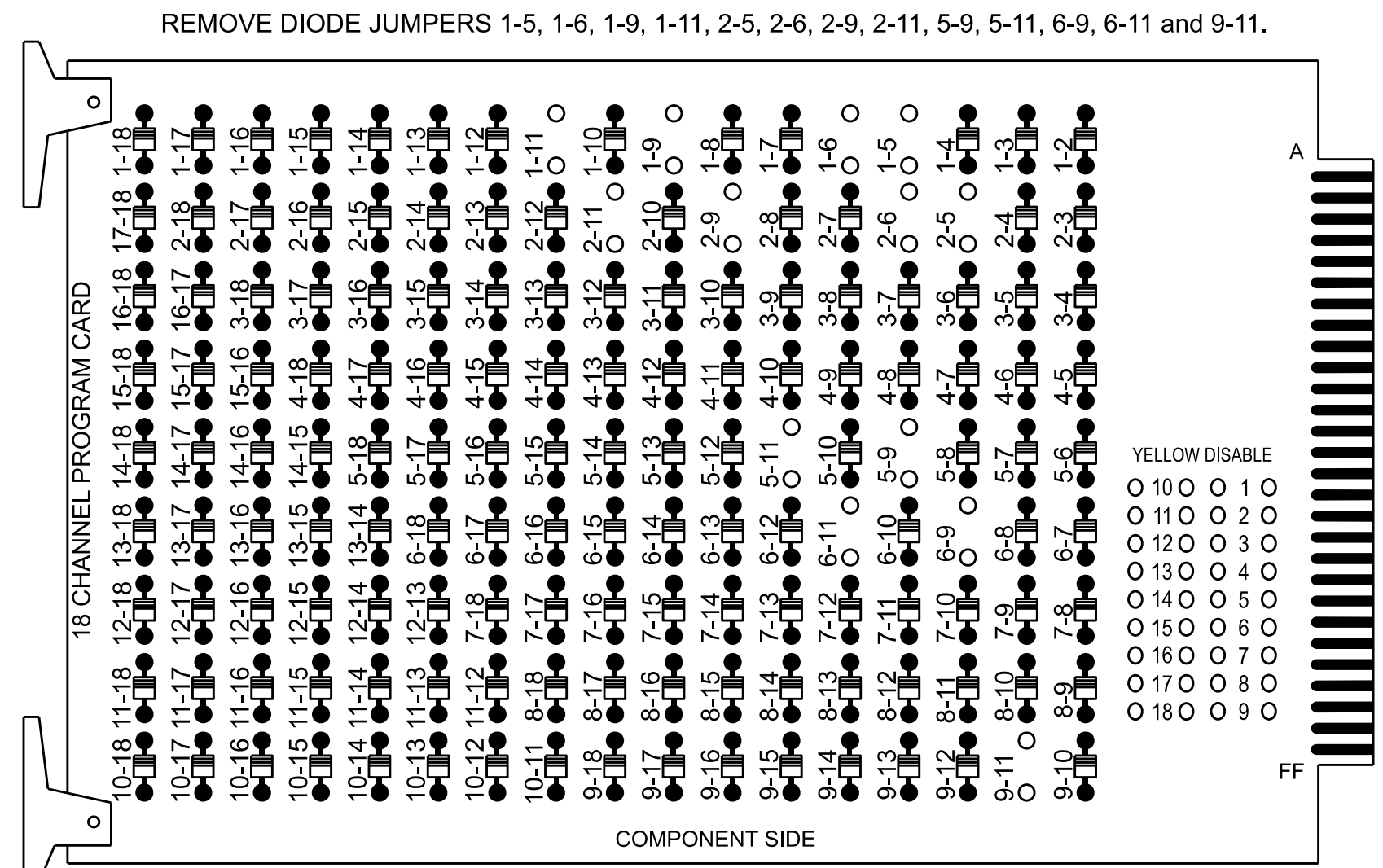


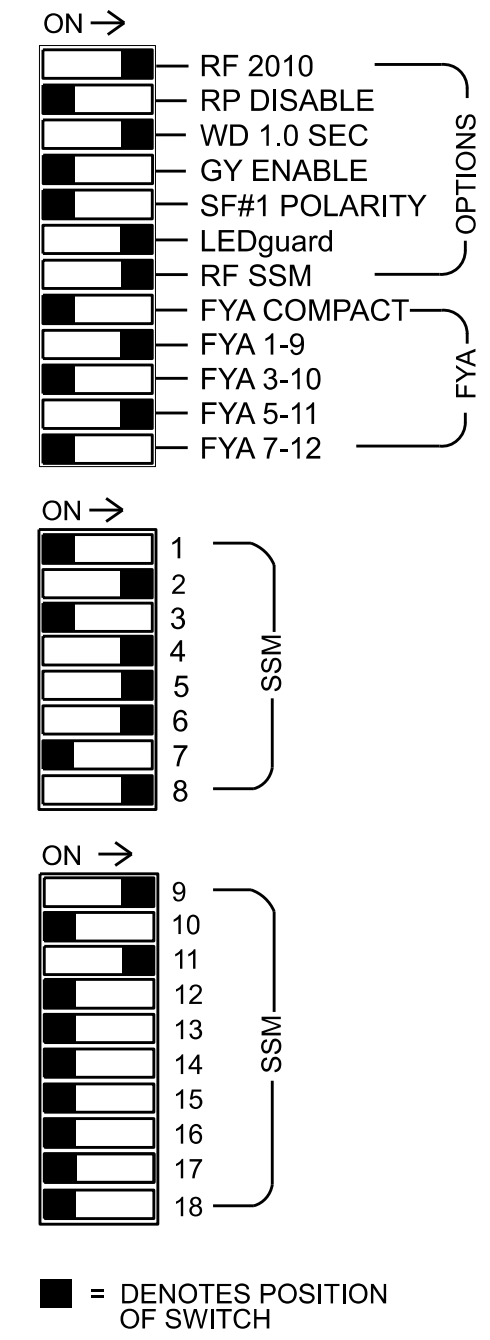
18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(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 vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- 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, S5, S7, S8, S11, AUXS1, AUX S4
 Phases Used.....1, 2, **3, 4, 5, 6
 Overlap "1".....*
 Overlap "2".....Not Used
 Overlap "3".....*
 Overlap "4".....Not Used
 Overlap "8".....*

*See overlap programming detail on sheet 2
 ** Used for timing purposes only

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	OL8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE	
SIGNAL HEAD NO.	11*	21,22	NU	NC	41	42	NU	42	51*	61,62	NU	NU	31	32	NU	11*	NU	51*	NU
RED		128			101	101		*	134		107	107							
YELLOW	*	129			102	102			135		108	108							
GREEN		130			103	103			136		109	109							
RED ARROW													A121					A114	
YELLOW ARROW								132					A122					A115	
FLASHING YELLOW ARROW													A123					A116	
GREEN ARROW	127				103			133	133		109								

NU = Not Used
 NC = No Connection
 * Denotes install load resistor. See load resistor installation detail this sheet.
 ★ See pictorial of head wiring in detail this sheet.

INPUT FILE POSITION LAYOUT

(front view)

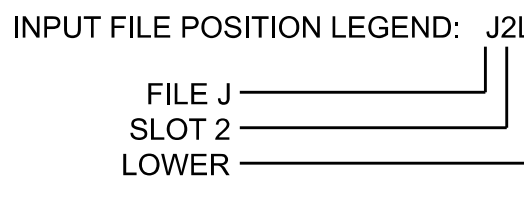
FILE	U	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
"I"	U	∅ 1	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	FS
	L	1A	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	DC ISOLATOR
"J"	U	∅ 5	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	FS
	L	5A	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	-ORS	DC ISOLATOR

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
1A	TB2-1,2	I1U	56	18	1*	1	15		X		X	
				-	29*	6	3		X	X	X	
5A	TB3-1,2	J1U	55	17	15*	5	15		X		X	
				-	31*	2	3		X	X	X	

* For the detectors to work as shown on the signal plan see the Detector Programming Detail for Alternate Phasing on Sheet 2 of this plan.



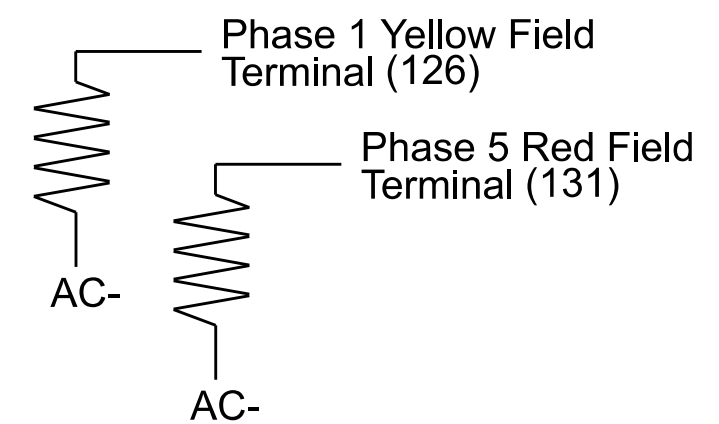
DETECTOR NOTES

- For all loops 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 loops 1A and 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.

LOAD RESISTOR INSTALLATION DETAIL

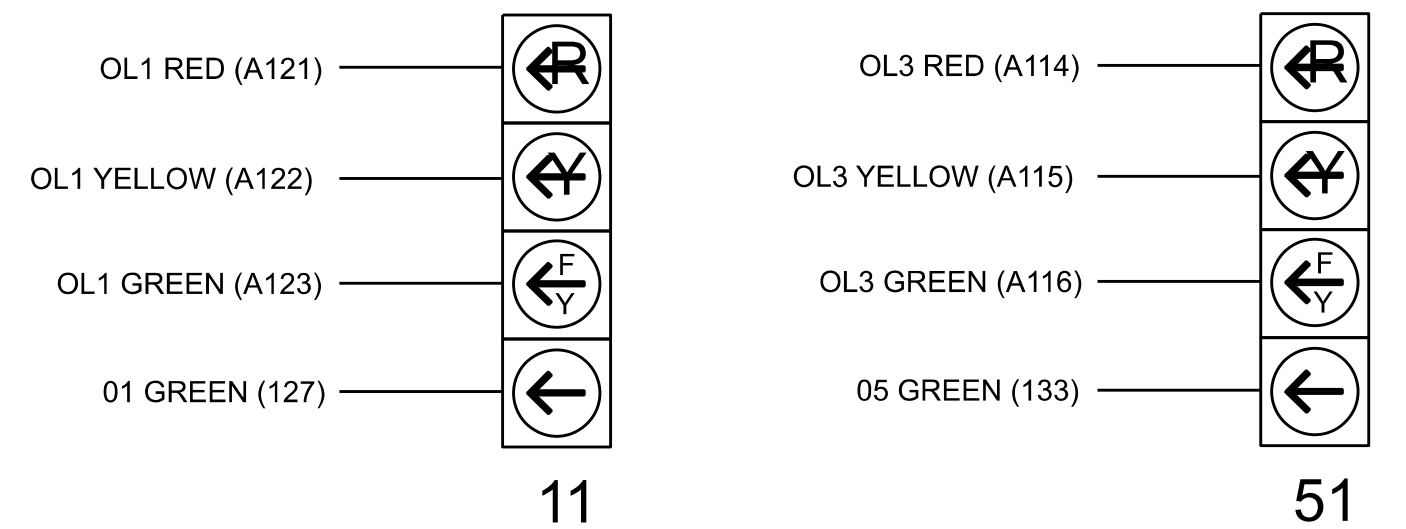
(install resistors as shown)

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



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1663T2
 DESIGNED: May 2025
 SEALED: 7/15/2025
 REVISED: N/A

Electrical Detail - Sheet 1 of 3

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

SR 1006 (Old Stage Road) at SR 2736 (Rock Service Station Road) and Back Field Road

Division 5 Wake County Fuquay-Varina

PLANNED BY: June 2025 REVIEWED BY:
 PREPARED BY: Zarrar Zafar REVIEWED BY:

REVISIONS INIT. DATE

Seal: SEAL 031001 ENGINEER TODD JOYCE

DocuSigned by: D. Todd Joyce 07/24/2025

SIG. INVENTORY NO. 05-1663T2