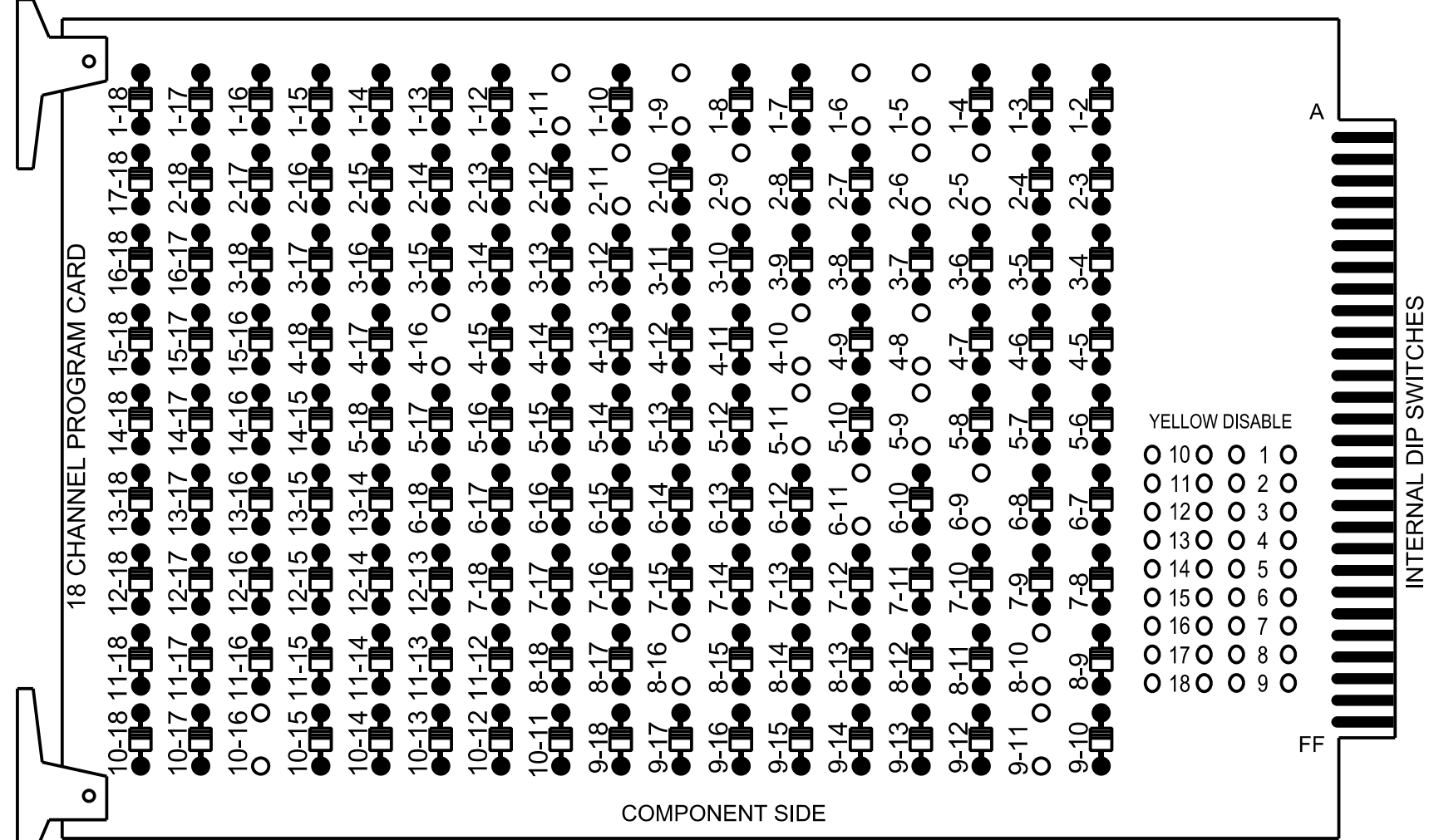


18 CHANNEL IP CONFLICT MONITOR

PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

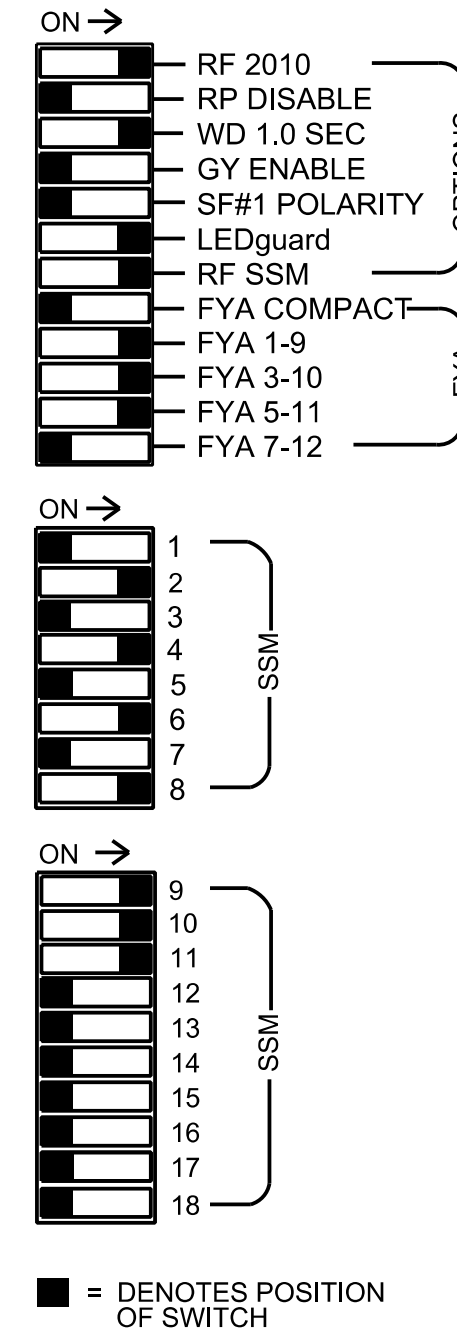
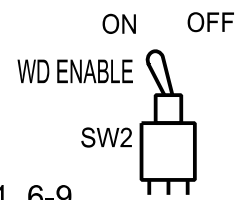
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 4-8, 4-10, 4-16, 5-9, 5-11, 6-9, 6-11, 8-10, 8-16, 9-11, and 10-16



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.
- Integrate monitor with Ethernet network in cabinet.



■ = DENOTES POSITION OF SWITCH

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.
- 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 enabled detectors used at this location.
- The cabinet and controller are part of Signal System #D08-29_Asheboro, US 64 Bus-NC 49 (Asheboro).

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,S12
 AUX S1,AUX S2,AUX S4
 Phases Used.....1,2,4,5,6,8,8 PED
 Overlap "1".....*
 Overlap "2".....*
 Overlap "3".....*
 Overlap "4".....*

*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		SPARE
SIGNAL HEAD NO.	11	21,22	NU	NU	41,42	NU	51	61,62	NU	NU	82,83,84	P81,P82	11	81	NU	51	NU	NU
RED		128			101			134			107							
YELLOW	*	129			102		*	135			108							
GREEN		130			103			136			109							
RED ARROW													A121	A124		A114		
YELLOW ARROW													A122	A125		A115		
FLASHING YELLOW ARROW													A123	A126		A116		
GREEN ARROW	127						133											
Hand icon													110					
Walking person icon													112					

NU = Not Used

- * 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 "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅ 1 1A	∅ 2 2A	S T	S T	S T	∅ 4 4A	S T	S T	S T	S T	S T	S T	NOT USED	FS DC ISOLATOR
L	NOT USED	∅ 2 2B	T Y	T Y	T Y	∅ 4 4B	T Y	T Y	T Y	T Y	T Y	T Y	∅ 8 PED DC ISOLATOR	ST DC ISOLATOR
U	∅ 5 5A	∅ 6 6A	T Y	T Y	T Y	∅ 8 8A	∅ 8 8C	T Y	T Y	T Y	T Y	T Y	T Y	T Y
L	NOT USED	∅ 6 6B	T Y	T Y	T Y	∅ 8 8B	NOT USED	T Y	T Y	T Y	T Y	T Y	T Y	T Y

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

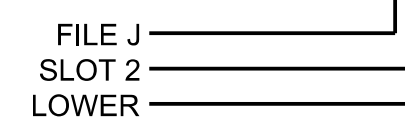
FS = FLASH SENSE
 ST = STOP TIME

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	
2A	TB2-5,6	I2U	39	1	29 ★	6	3		X	X	X	X
2B	TB2-7,8	I2L	43	5	3	2			X	X	X	
4A	TB4-9,10	I6U	41	3	8	4	3		X	X	X	
4B	TB4-11,12	I6L	45	7	9	4	15		X	X	X	
5A	TB3-1,2	J1U	55	17	15 ★	5	15		X	X	X	
6A	TB3-5,6	J2U	40	2	16	6			X	X	X	
6B	TB3-7,8	J2L	44	6	17	6			X	X	X	
8A	TB5-9,10	J6U	42	4	22	8	3		X	X	X	
8B	TB5-11,12	J6L	46	8	23	8	10		X	X	X	
8C	TB7-1,2	J7U	66	32	24	8	15		X	X	X	
PED PUSH BUTTONS												
P81,P82	TB8-8,9	I13L	70	36	8	PED 8						

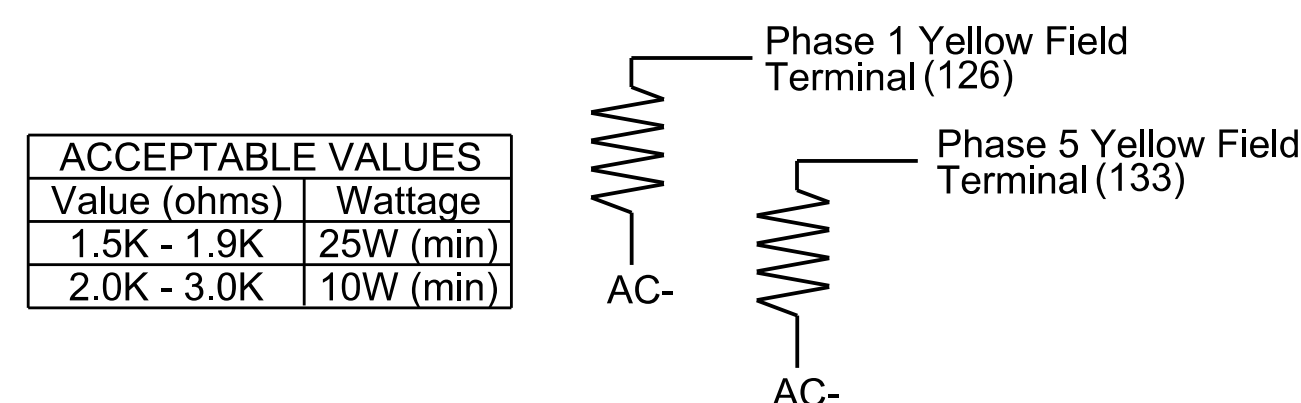
★ For the detectors to work as shown on the signal design plan, see the Detector Programming Detail for Alternate Phasing on Sheet 2.

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)

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.

HNTB HNTB NORTH CAROLINA, P.C.
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FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0507
 DESIGNED: AUGUST 2021
 SEALED: 05/21/2024
 REVISED:

Signal Upgrade - Final Design
 Electrical Detail - Sheet 1 of 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

US 64 Bus. (Dixie Dr) at SR 1144 (Mack Rd)/Fisher Cir

Division 8 Randolph County Asheboro

PLAN DATE: August 2021 REVIEWED BY: A.D. Klinksiek
 PREPARED BY: N.K. Vianich REVIEWED BY: N.R. Simmons

REVISIONS: _____ INT. DATE: _____

DocuSigned by: *Natasha R. Simmons* 5/21/2024
 SIGNATURE DATE
 SIG. INVENTORY NO. 08-0507

750 N. Greenfield Pkwy, Garner, NC 27529