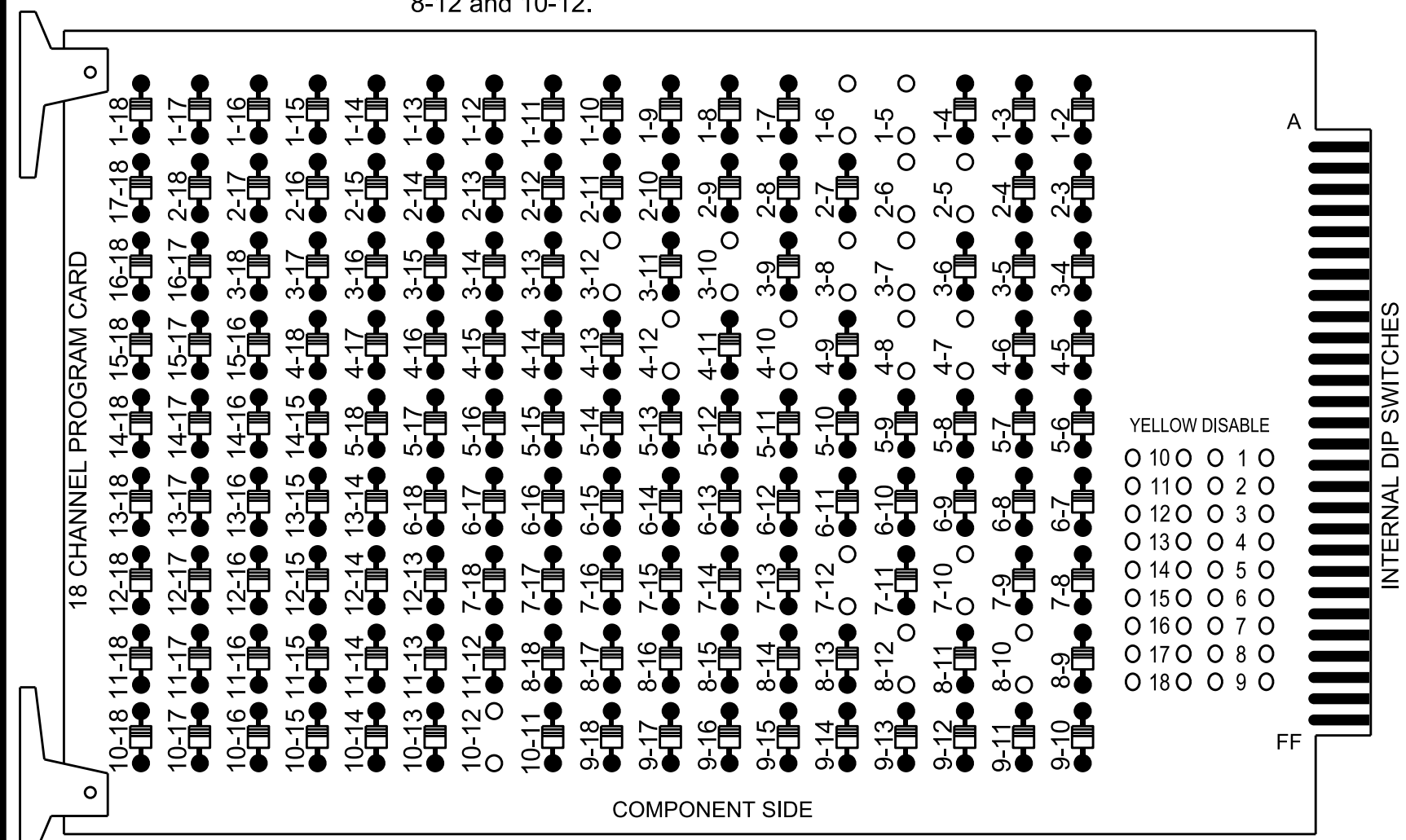


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

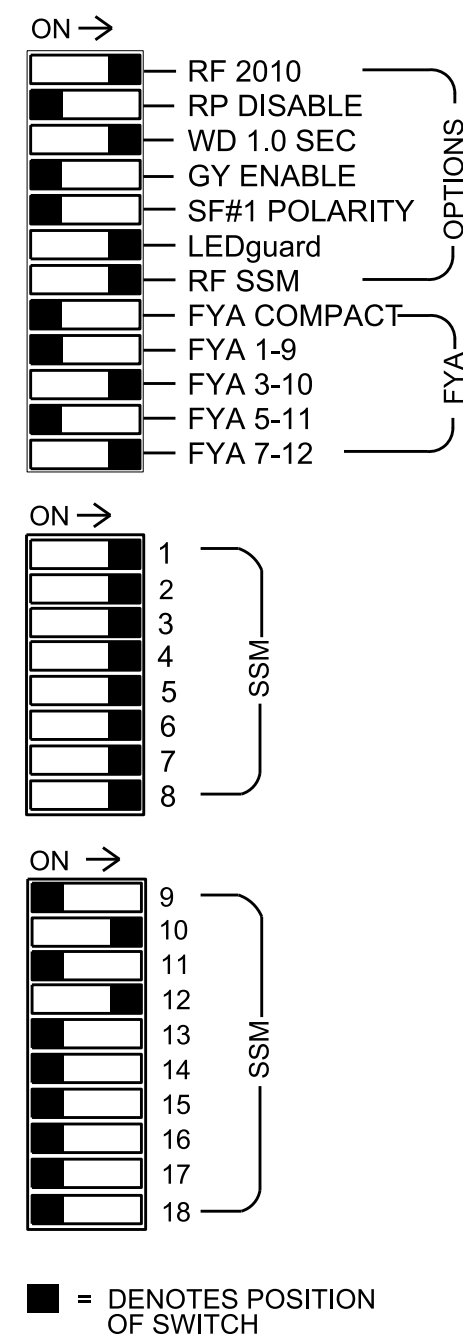
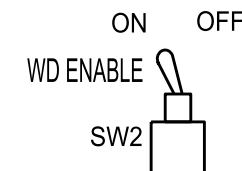
REMOVE DIODE JUMPERS 1-5, 1-6, 2-5, 2-6, 3-7, 3-8, 3-10, 3-12, 4-7, 4-8, 4-10, 4-12, 7-10, 7-12, 8-10, 8-12 and 10-12.



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.



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.
- The cabinet and controller are part of the (US 401 Closed Loop System #29) Signal System #: D05-09_Garner.

EQUIPMENT INFORMATION

Controller.....2070LX
 Cabinet.....332 w/ Aux
 Software.....Q-Free MAXTIME
 Cabinet Mount.....18 With Aux. Output File
 Load Switches Used.....S1, S2, S4, S5, S7, S8, S10, S11, AUX S2, AUX S5
 Phases Used.....1, 2, 3, 4, 5, 6, 7, 8, *9
 Overlap "1".....NOT USED
 Overlap "2".....*
 Overlap "3".....NOT USED
 Overlap "4".....*
 Overlap "5".....NOT USED
 Overlap "6".....NOT USED
 Overlap "7".....*
 Overlap "8".....*

*See overlap programming detail on Sheet 2.

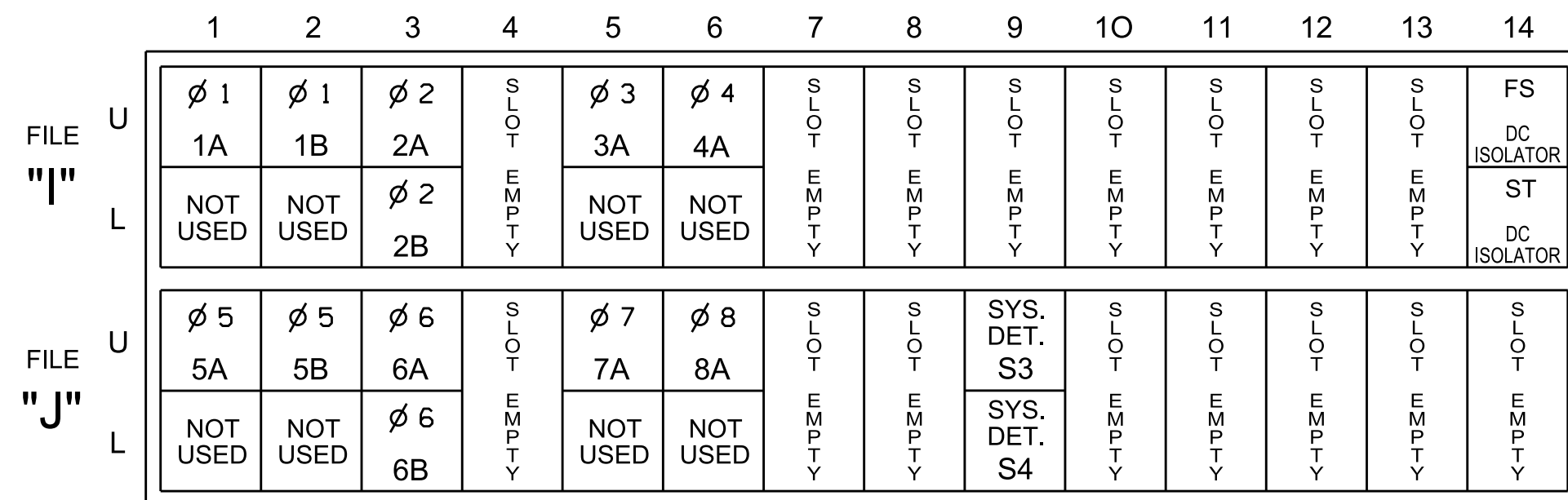
SIGNAL HEAD HOOK-UP CHART

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	OL7	2	2 PED	3	4	4 PED	5	OL8	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE					
SIGNAL HEAD NO.	11	82	21,22	NU	22	31	41,42	NU	42	51	61,62	NU	62	71	81,82	NU	NU	31	NU	NU	71	NU	
RED		128		*		101				134		*		107									
YELLOW		129				102				135				108									
GREEN		130				103				136				109									
RED ARROW	125									131									A124			A101	
YELLOW ARROW	126	126			117				132	132				123					A125			A102	
FLASHING YELLOW ARROW																			A126			A103	
GREEN ARROW	127	127			118	118			133	133				124	124								

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)



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

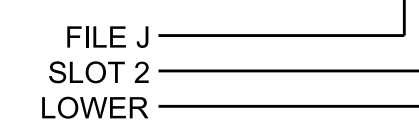
FS = FLASH SENSE
 ST = STOP TIME

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	1/9			X		X	
1B	TB2-5,6	I2U	39	1	2	1	15		X		X	
2A	TB2-9,10	I3U	63	29	4	2			X	X	X	
2B	TB2-11,12	I3L	76	42	5	2			X	X	X	
3A	TB4-5,6	I5U	58	20	7	3	15		X		X	
				-	30	8			X		X	
4A	TB4-9,10	I6U	41	3	8	4			X		X	
5A	TB3-1,2	J1U	55	17	15	5			X		X	
5B	TB3-5,6	J2U	40	2	16	5	15		X		X	
6A	TB3-9,10	J3U	64	30	18	6			X	X	X	
6B	TB3-11,12	J3L	77	43	19	6			X	X	X	
7A	TB5-5,6	J5U	57	19	21	7	15		X		X	
				-	32	4	3		X		X	
8A	TB5-9,10	J6U	42	4	22	8			X		X	
*S3	TB7-9,10	J9U	59	21	27	SYS						
*S4	TB7-11,12	J9L	61	23	28	SYS						

*System detector only. Remove any assigned vehicle phase.

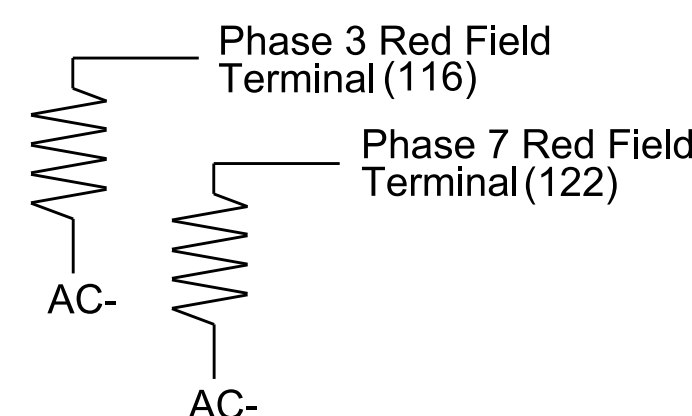
INPUT FILE POSITION LEGEND: J2L



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)

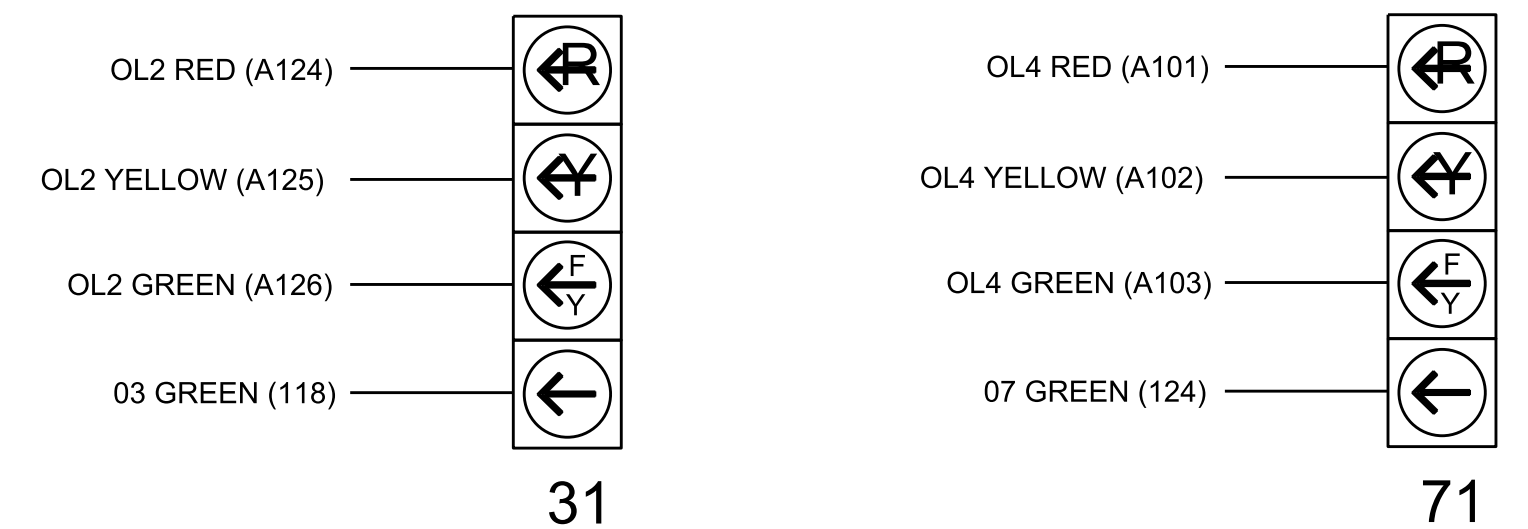


COUNTDOWN PEDESTRIAN SIGNAL OPERATION

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.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-0184T1
 DESIGNED: July 2024
 SEALED: 8-12-24
 REVISED: N/A

Electrical Detail - Sheet 1 of 3

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

US 401 (Fayetteville Rd.)
 at
 SR 1010 (Ten-Ten Rd.)
 Division 5 Wake County Fuquay-Varina
 PLAN DATE: August 2024 REVIEWED BY: -
 PREPARED BY: James Peterson REVIEWED BY: -
 REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

 Ryan W. Hough
 ENGINEER
 08/13/2024
 DATE
 SIG. INVENTORY NO. 05-0184T1