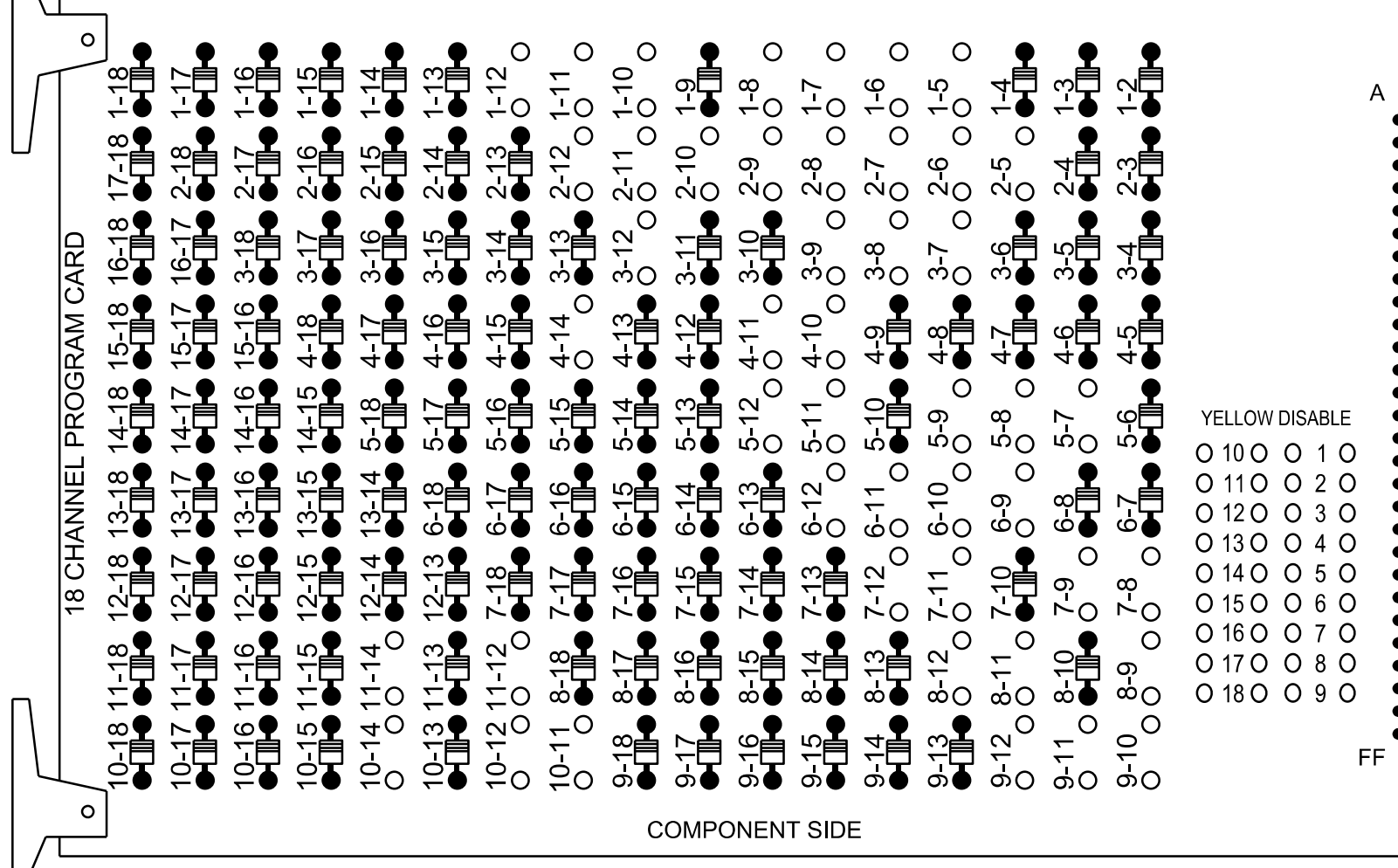


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

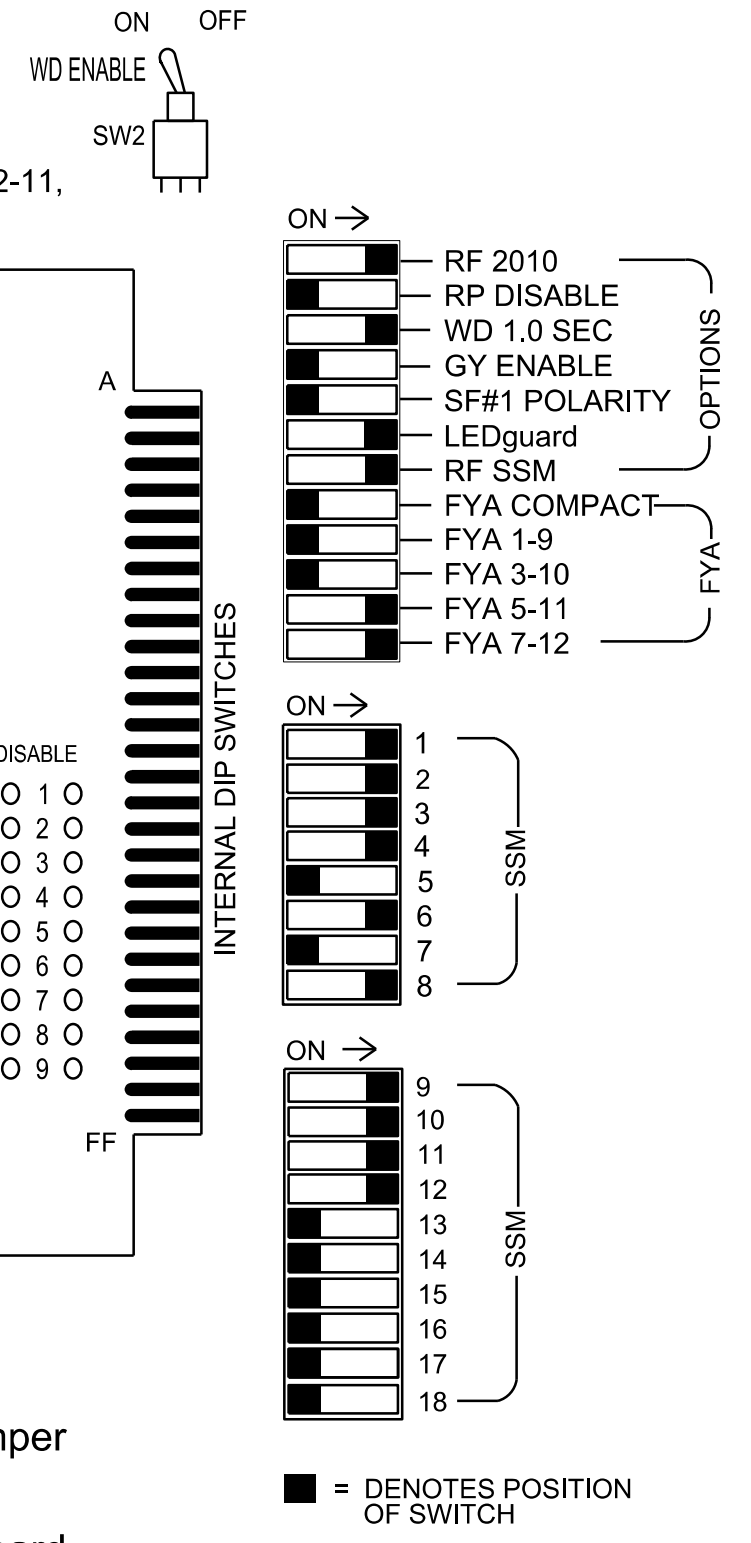
REMOVE DIODE JUMPERS 1-5, 1-6, 1-7, 1-8, 1-10, 1-11, 1-12, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10, 2-11, 2-12, 3-7, 3-8, 3-9, 3-12, 4-10, 4-11, 4-14, 5-7, 5-8, 5-9, 5-11, 5-12, 6-9, 6-10, 6-11, 6-12, 7-8, 7-9, 7-11, 7-12, 8-9, 8-11, 8-12, 9-10, 9-11, 9-12, 10-11, 10-12, 10-14, 11-12 AND 11-14.



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 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 D14-12 Waynesville Signal System.

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, S6, S7, S8, S10, S11, AUX S1, AUX S2, AUX S4, AUX S5
 Phases Used.....1, 2, 3, 4, 4PED, 5, 6
 Overlap "1".....*
 Overlap "2".....*
 Overlap "3".....*
 Overlap "4".....*
 Overlap "7".....*
 Overlap "8".....*

*See overlap programming detail on sheet 2

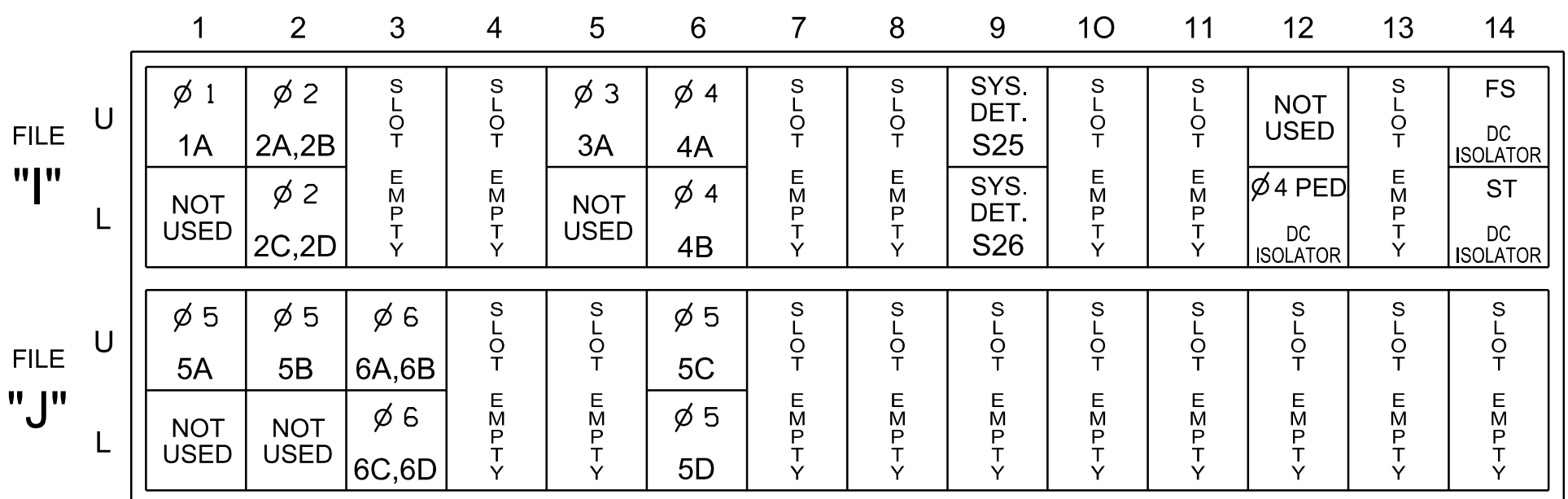
SIGNAL HEAD HOOK-UP CHART

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	1	2	2 PED	3	4	4 PED	5	6	6 PED	OL7	OL8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11	21,22	NU	31	41,42,43,44,45	P41, P42	51	61,62	NU	52	32,33	NU	23,24	63,64	NU	51	52	NU
RED		128			101			134			107		A121	A124				
YELLOW		129			102		*	135		*			A122	A125				
GREEN		130			103			136					A123	A126				
RED ARROW	125				116											A114	A101	
YELLOW ARROW	126				117						108					A115	A102	
FLASHING YELLOW ARROW																A116	A103	
GREEN ARROW	127				118			133			124	109						
Hand								104										
Walker								106										

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

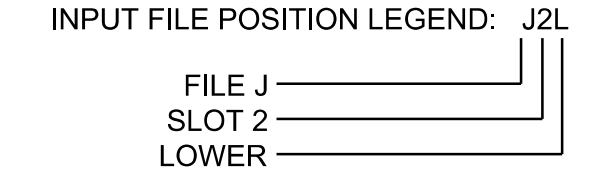
FS = FLASH SENSE
 ST = STOP TIME

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					X	
2A,2B	TB2-5,6	I2U	39	1	2	2				X	X	
2C,2D	TB2-7,8	I2L	43	5	3	2				X	X	
3A	TB4-5,6	I5U	58	20	7	3				X	X	
4A	TB4-9,10	I6U	41	3	8	4	10			X	X	
4B	TB4-11,12	I6L	45	7	9	4	10			X	X	
*S25	TB6-9,10	I9U	60	22	13							
*S26	TB6-11,12	I9L	62	24	14							
5A	TB3-1,2	J1U	55	17	15	5	15			X	X	
				-	31	2				X	X	
				-	33	2				X	X	
5B	TB3-5,6	J2U	40	2	16	5	15			X	X	
5C	TB5-9,10	J6U	42	4	22	5	15			X	X	
5D	TB5-11,12	J6L	46	8	23	5	15			X	X	
6A,6B	TB3-9,10	J3U	64	30	18	6				X	X	
6C,6D	TB3-11,12	J3L	77	43	19	6				X	X	
PED PUSH BUTTONS												
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						

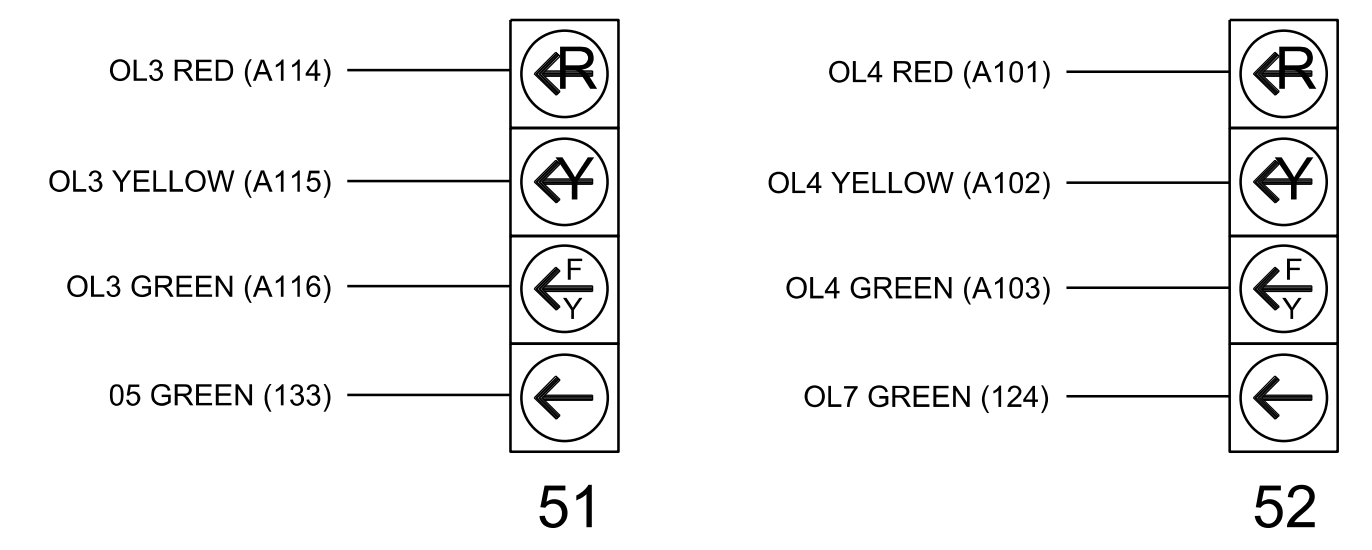
NOTE: INSTALL DC ISOLATOR IN INPUT FILE SLOT I12.

*System detector only. Remove any assigned vehicle phase.



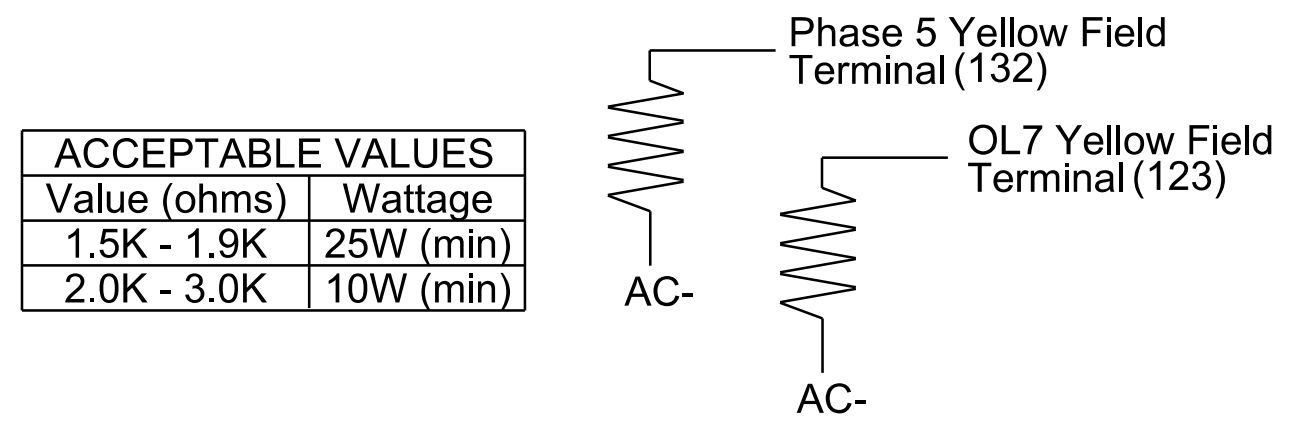
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



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.

Electrical Detail - Sheet 1 of 2
 Final Design

US 276 (Russ Avenue) at US 23-74 WB Ramps

Division 14 Haywood County Waynesville

PLAN DATE: April 2023 REVIEWED BY: WJ Hamilton

PREPARED BY: TS Popelka RKA PROJ. NO: 16085 (040)

REVISIONS: INIT. DATE

750 N. Greenfield Pkwy, Garner, NC 27529

Infrastructure Consulting Services, Inc. RKA RAMEY KEMP ASSOCIATES

6210 University Executive Park Drive Suite 220 Charlotte, North Carolina 28226 Phone: 704-548-4200 | www.rameykemp.com | NC License No. F-1489

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 14-0974
 DESIGNED: Apr 2023
 SEALED: 04/11/2023
 REVISED: N/A

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 32396 WILLIAM J. HAMILTON

DocuSign Envelope ID: 42669270468484

William J. Hamilton 04/11/2023

SIGNATURE DATE

SIG. INVENTORY NO. 14-0974