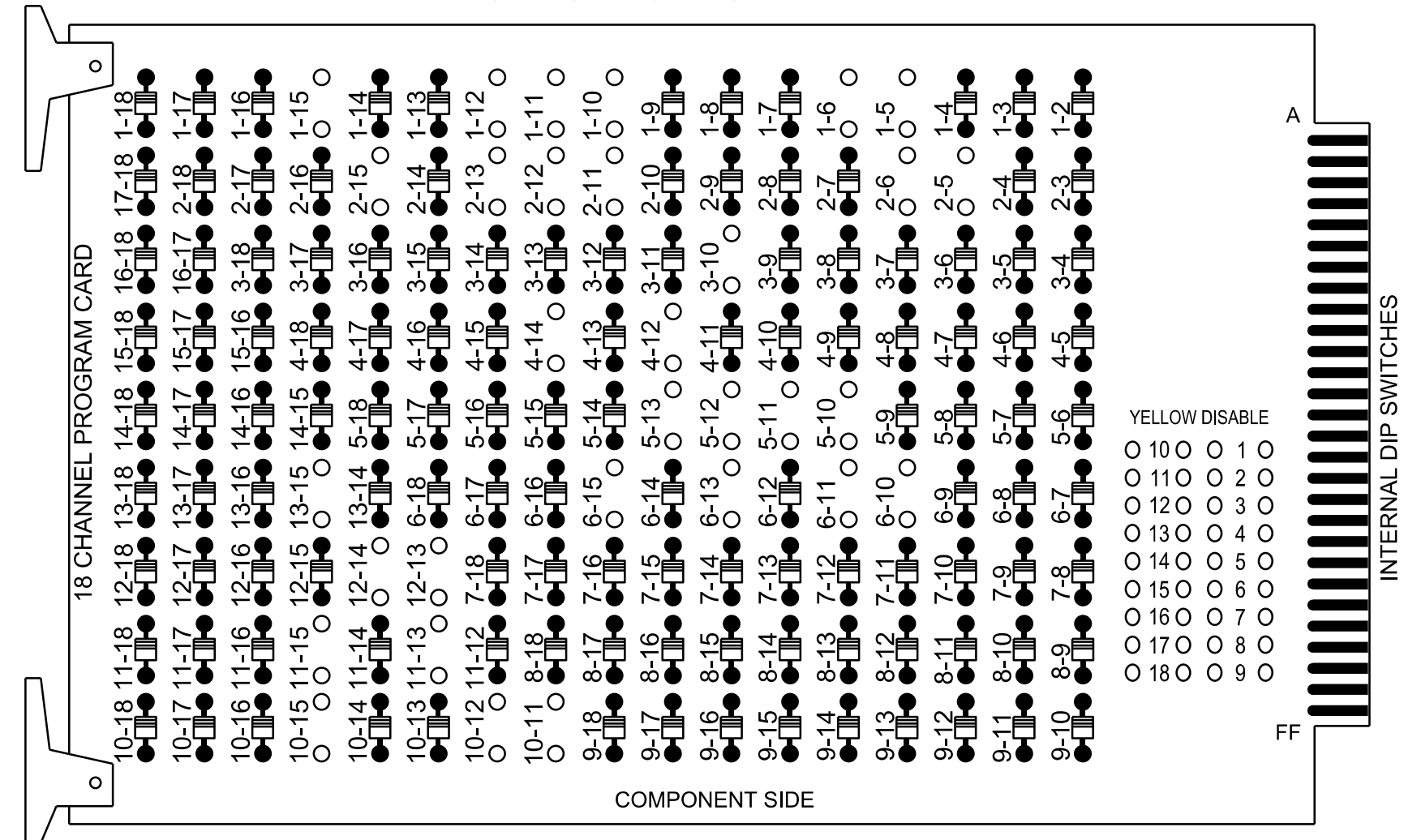


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

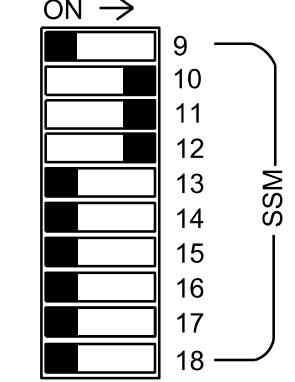
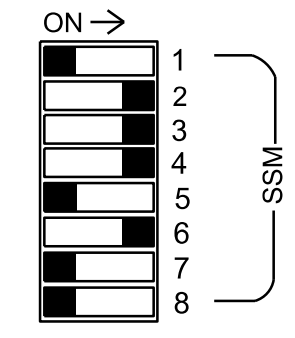
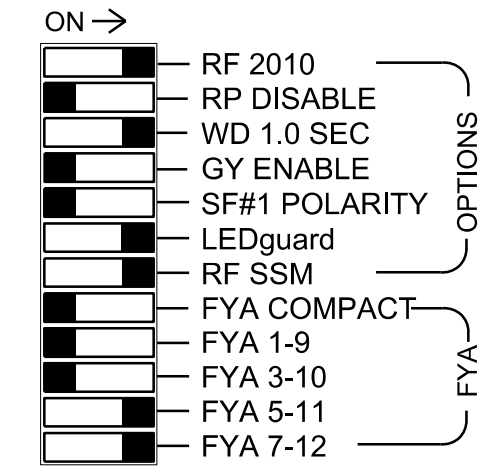
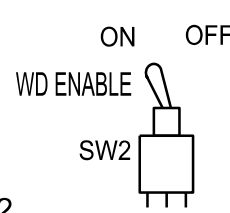
REMOVE DIODE JUMPERS 1-5, 1-6, 1-10, 1-11, 1-12, 1-15, 2-5, 2-6, 2-11, 2-12, 2-13, 2-15, 3-10, 4-12, 4-14, 5-10, 5-11, 5-12, 5-13, 6-10, 6-11, 6-13, 6-15, 10-11, 10-12, 10-15, 11-13, 11-15, 12-13, 12-14 AND 13-15.



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 plan.
- Program controller to start up in phase 2 Green Walk and 6 Green 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, S3, S4, S5, S6, S7, S8, AUX S2, AUX S4, AUX S5
 Phases Used.....1, 2, 2PED, 3, 4, 4PED, 5, 6, 6PED
 Overlap "1".....NOT USED
 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	OL4	SPARE
SIGNAL HEAD NO.	11,12	21,22	P21, P22	31	32	41	42	P41, P42	51	61,62	P61, P62	NU	NU	NU	33	51	43	NU
RED	128		116	116	101	101				134					A124			A101
YELLOW	129		117	117	102	102		*	135									
GREEN	130		118	118	103	103			136									
RED ARROW	125																	A114
YELLOW ARROW	126														A125	A115	A102	
FLASHING YELLOW ARROW															A126	A116	A103	
GREEN ARROW	127		118		103				133									
Hand			113					104		119								
Walker			115					106		121								

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

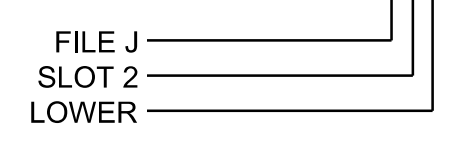
INPUT FILE CONNECTION & PROGRAMMING CHART

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	X	
1B	TB2-5,6	I2U	39	1	2	1				X	X	
1C	TB2-7,8	I2L	43	5	3	1	15			X	X	
2A	TB2-9,10	I3U	63	29	4	2				X	X	
2B	TB2-11,12	I3L	76	42	5	2				X	X	
3A	TB4-5,6	I5U	58	20	7	3	3			X	X	
4A	TB4-9,10	I6U	41	3	8	4	3			X	X	
*S21	TB6-9,10	I9U	60	22	13							
*S22	TB6-11,12	I9L	62	24	14							
5A	TB3-1,2	J1U	55	17	15	5	15			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	
6B	TB3-11,12	J3L	77	43	19	6				X	X	
*S23	TB7-9,10	J9U	59	21	27							
*S24	TB7-11,12	J9L	61	23	28							
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2						
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						

NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOT I12.

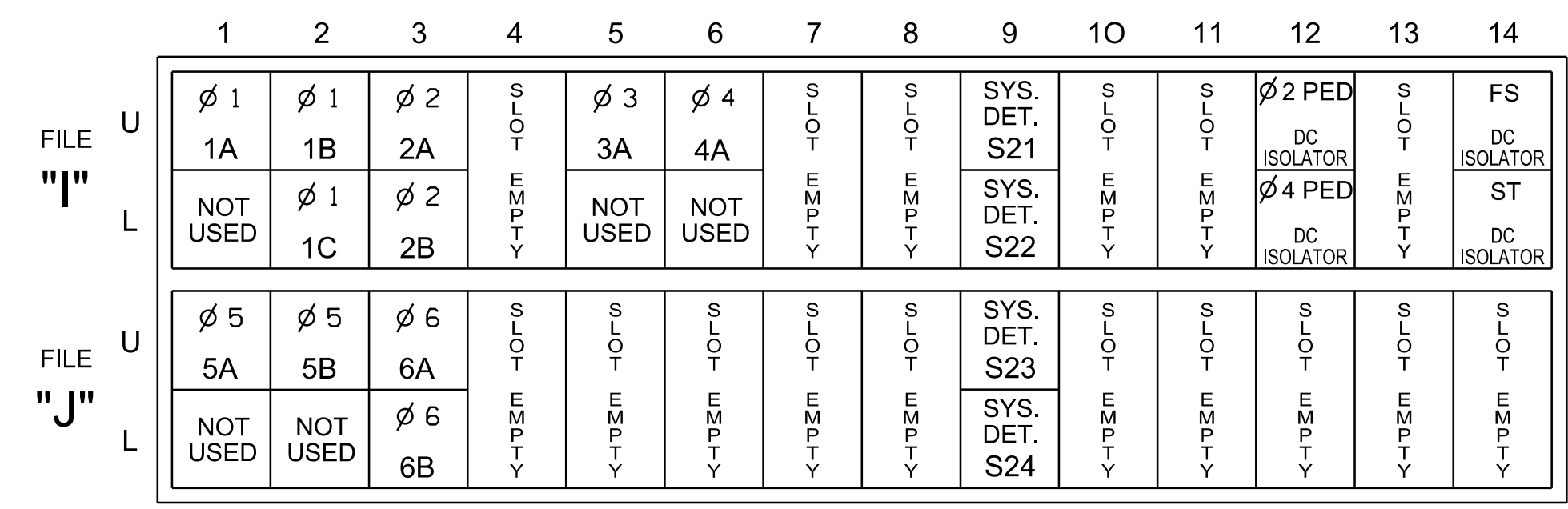
*System detector only. Remove any assigned vehicle phase.

INPUT FILE POSITION LEGEND:



INPUT FILE POSITION LAYOUT

(front view)

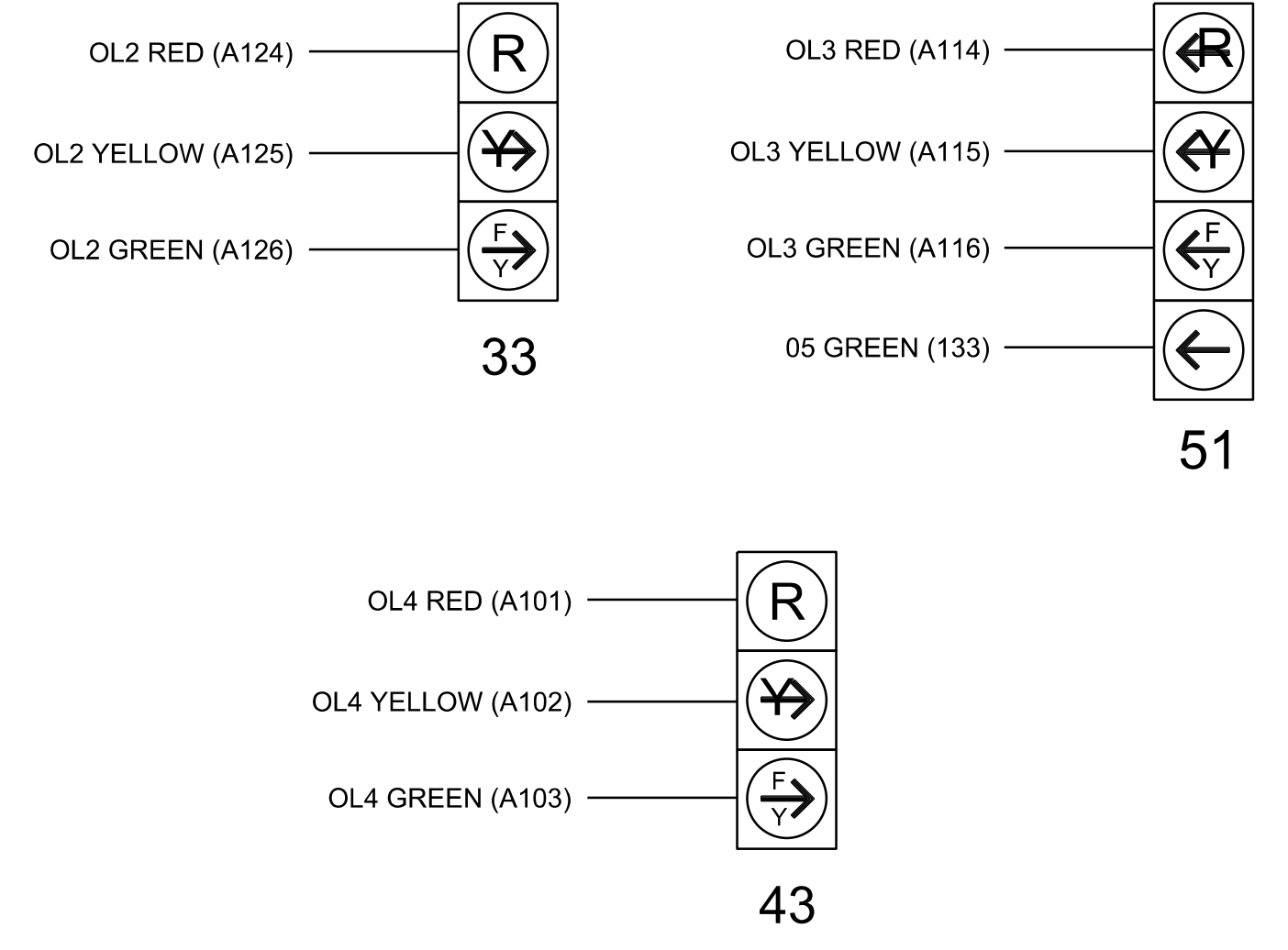


EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

FYA SIGNAL WIRING DETAIL

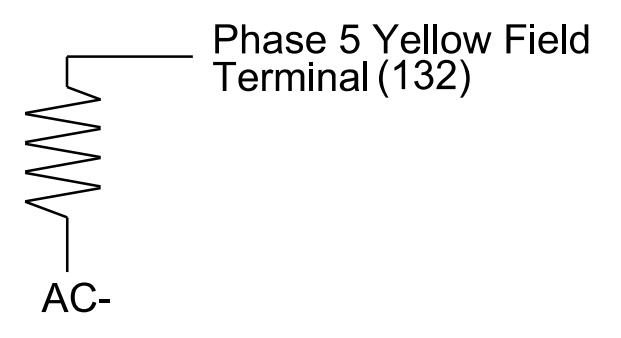
(wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)

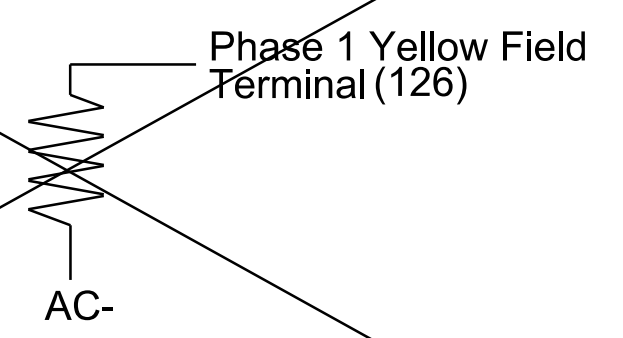
ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



LOAD RESISTOR REMOVAL DETAIL

(remove resistor as shown)

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



REMOVE!

Electrical Detail - Sheet 1 of 2
Final Design

Prepared For:

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US 276 (Russ Avenue)
 at
 Frazier Street /
 Ingles Entrance
 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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL SEAL 32396
 ENGINEER
 WILLIAM J. HAMILTON
 04/11/2023
 DATE
 SIG. INVENTORY NO. 14-1075