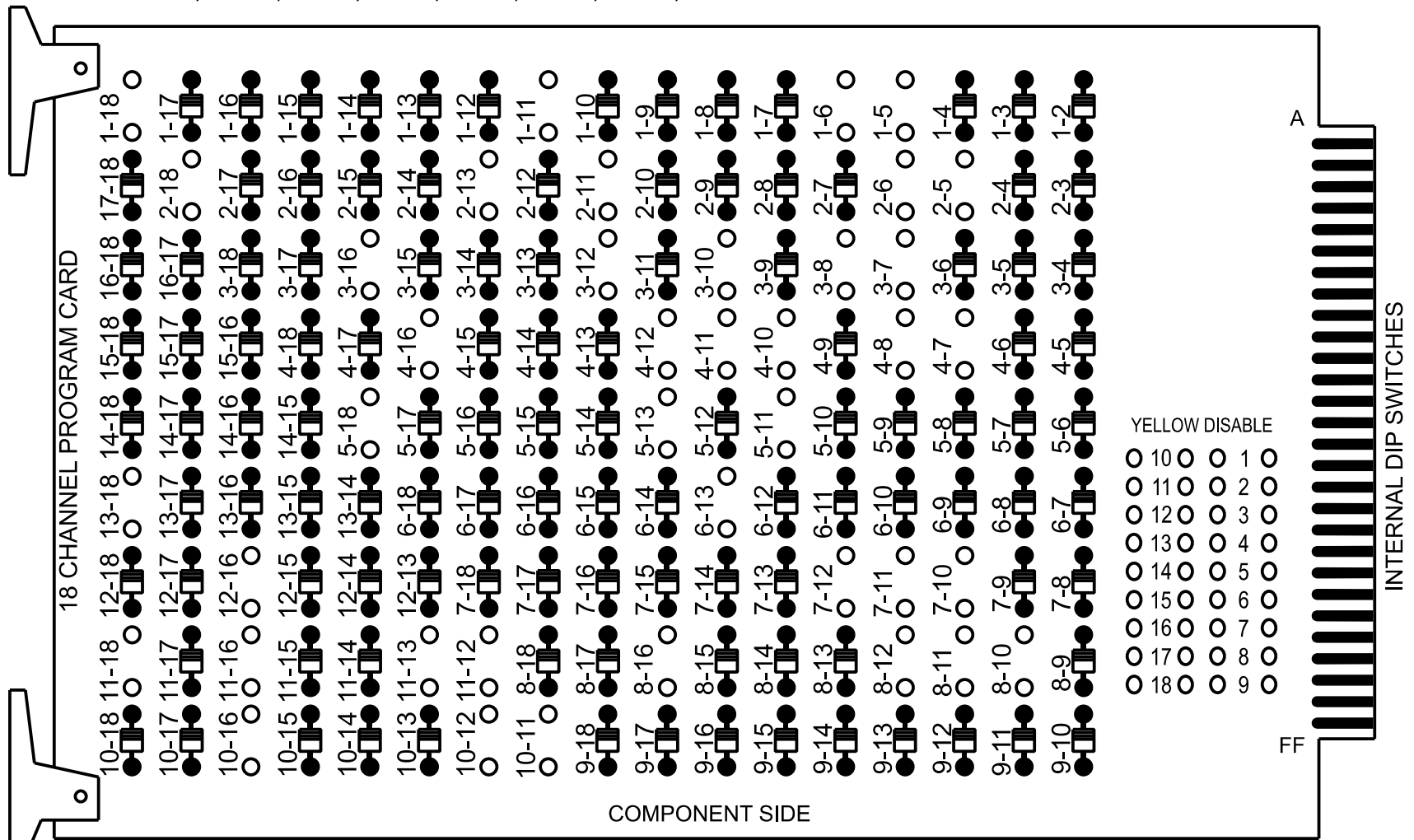


18 CHANNEL CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-11, 1-18, 2-5, 2-6, 2-11, 2-13, 2-18, 3-7, 3-8, 3-10, 3-12, 3-16, 4-7, 4-8, 4-10, 4-11, 4-12, 4-16, 5-11, 5-13, 5-18, 6-13, 7-10, 7-11, 7-12, 8-10, 8-11, 8-12, 8-16, 10-11, 10-12, 10-16, 11-12, 11-13, 11-16, 11-18, 12-16, and 13-18.



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.

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 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.

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, S7, S8, S10, S11, S12, AUX S2, AUX S4, AUX S5, AUX S6
Phases Used.....1, 2, 2PED, 3, 4, 5, 6, 7, 8, 8PED
Overlap "1".....Not Used
Overlap "2".....*
Overlap "3".....*
Overlap "4".....*
Overlap "5".....Not Used
Overlap "6".....*

*See overlap programming detail on sheet 2

SIGNAL HEAD HOOK-UP CHART

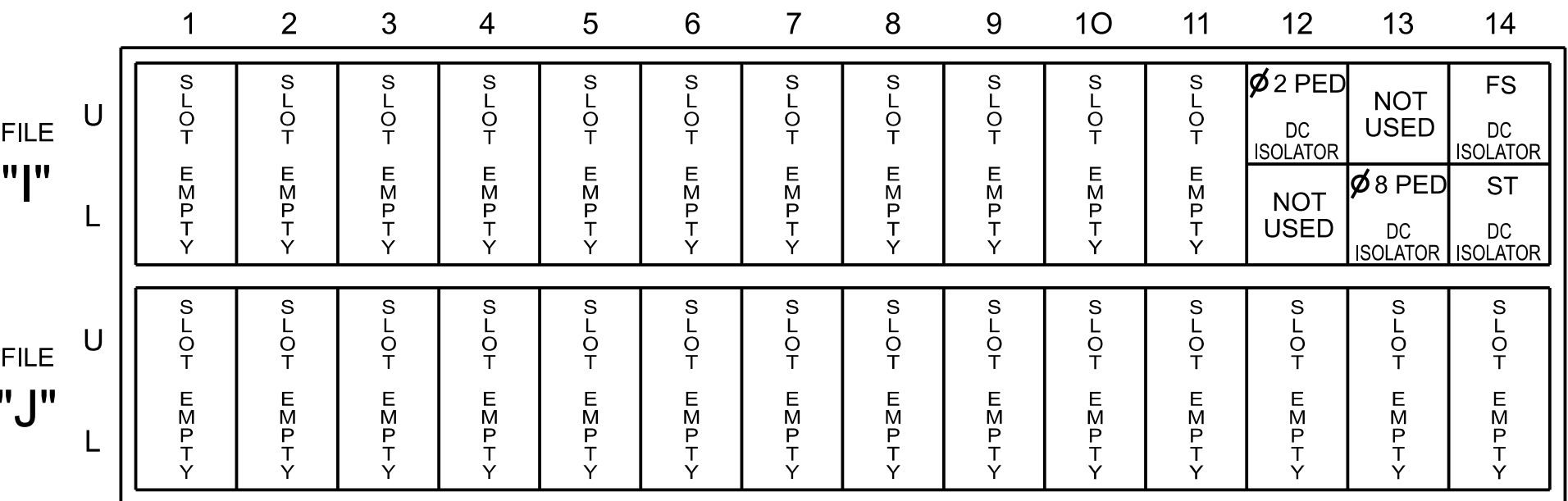
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	OL5	OL3	OL4	OL6
SIGNAL HEAD NO.	11	21,22	P21, P22	31	41,42	NU	43	61,62	NU	71	81,82	P81, P82	NU	31	NU	43	71	51,52
RED		128			101			134			107					A114		
YELLOW		129		*	102		*	135		*	108							
GREEN		130			103			136			109							
RED ARROW	125												A124			A101	A104	
YELLOW ARROW	126												A125		A115	A102	A105	
FLASHING YELLOW ARROW													A126		A116	A103		
GREEN ARROW	127			118			133			124								A106
Hand icon			113									110						
Walking person icon			115									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)



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

FS = FLASH SENSE
ST = STOP TIME

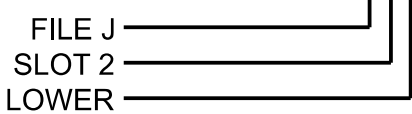
INPUT FILE CONNECTION & PROGRAMMING CHART

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	-	-	-	*	33	1	3.0		X		X	
2A	-	-	-	*	38	2			X		X	
3A	-	-	-	*	34	3	15.0		X		X	
4A	-	-	-	*	126	8	3.0		X		X	
5A	-	-	-	*	44	4			X		X	
5B	-	-	-	*	35	5	3.0		X		X	
5C	-	-	-	*	51	5			X		X	
6A	-	-	-	*	54	5	15.0		X		X	
7A	-	-	-	*	56	6			X		X	
8A	-	-	-	*	36	7	15.0		X		X	
				*	128	4	3.0		X		X	
				*	60	8	10.0		X		X	
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2						
P81,P82	TB8-8,9	I13L	70	36	8	PED 8						

*For Input Point numbers, see SDLC NON-INTRUSIVE DETECTION CHART this sheet.

NOTE:
INSTALL DC ISOLATORS
IN INPUT FILE SLOTS
I12 AND I13.

INPUT FILE POSITION LEGEND: J2L



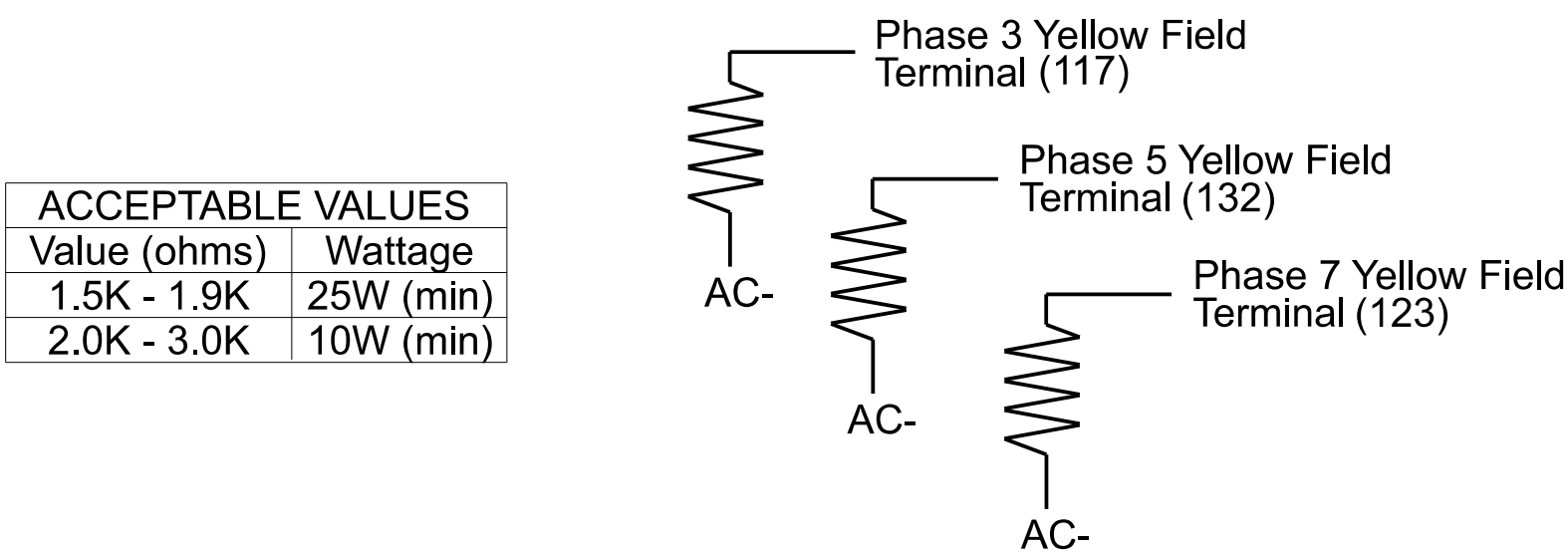
SDLC NON-INTRUSIVE DETECTION CHART

	Detector Rack #3		Detector Rack #4	
Input Point	Det # (Index)	Detector Zone	Det # (Index)	Detector Zone
1	33	1A	49	NU
2	34	3A	50	NU
3	35	5A	51	5B
4	36	7A	52	NU
5	37	NU	53	NU
6	38	2A	54	5C
7	39	NU	55	NU
8	40	NU	56	6A
9	41	NU	57	NU
10	42	NU	58	NU
11	43	NU	59	NU
12	44	4A	60	8A
13	45	NU	61	NU
14	46	NU	62	NU
15	47	NU	63	NU
16	48	NU	64	NU

NU = Not Used

LOAD RESISTOR INSTALLATION DETAIL

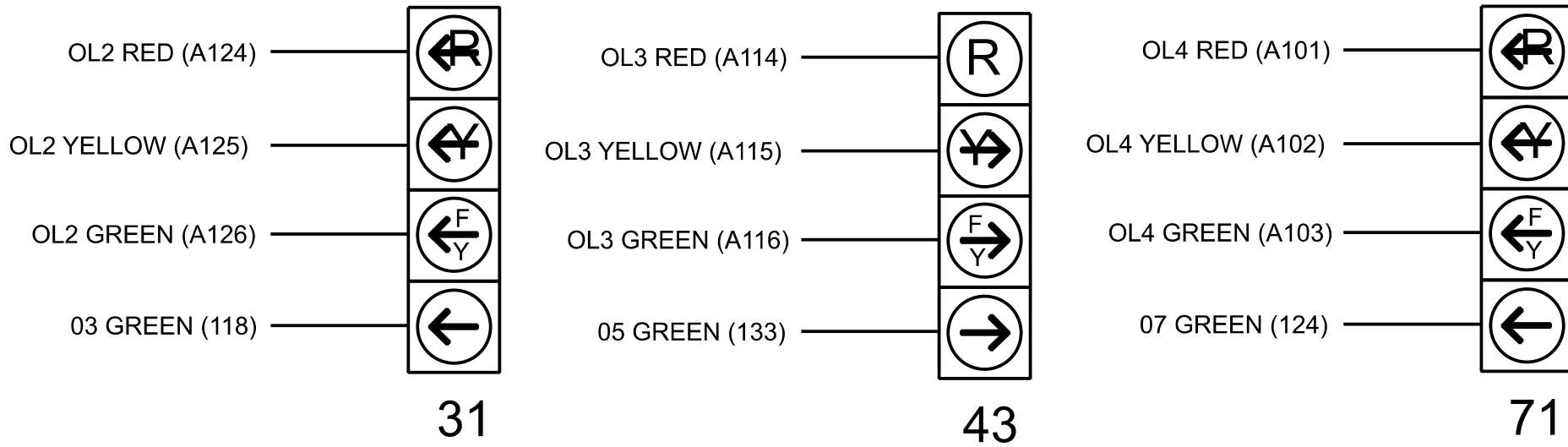
(install resistors as shown)



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

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



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.

Signal Upgrade - Final Design
Electrical Detail - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:		NC 18-268 (E. Main St)/ SR 2510 (E. Main St) at NC 18-268/SR 1001 Oakwoods Rd)		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031464 N. K. SIMMONS	
Prepared for the Offices of:		Division 11 Wilkes County Wilkesboro		Document Not Considered Final Unless All Signatures Completed	
PLAN DATE: July 2025		REVIEWED BY: N. R. Simmons		Designed by: N. K. Simmons	
PREPARED BY: E.E. Tiller		REVIEWED BY: N. K. Vianich		DocuSigned by: Natasha R. Simmons	
REVISIONS		INIT.		DATE	
750 N. Greenfield Pkwy, Garner, NC 27529		4/30/2026		DATE	
		SIGNATURE		DATE	
		SIG. INVENTORY NO.		11-0898	