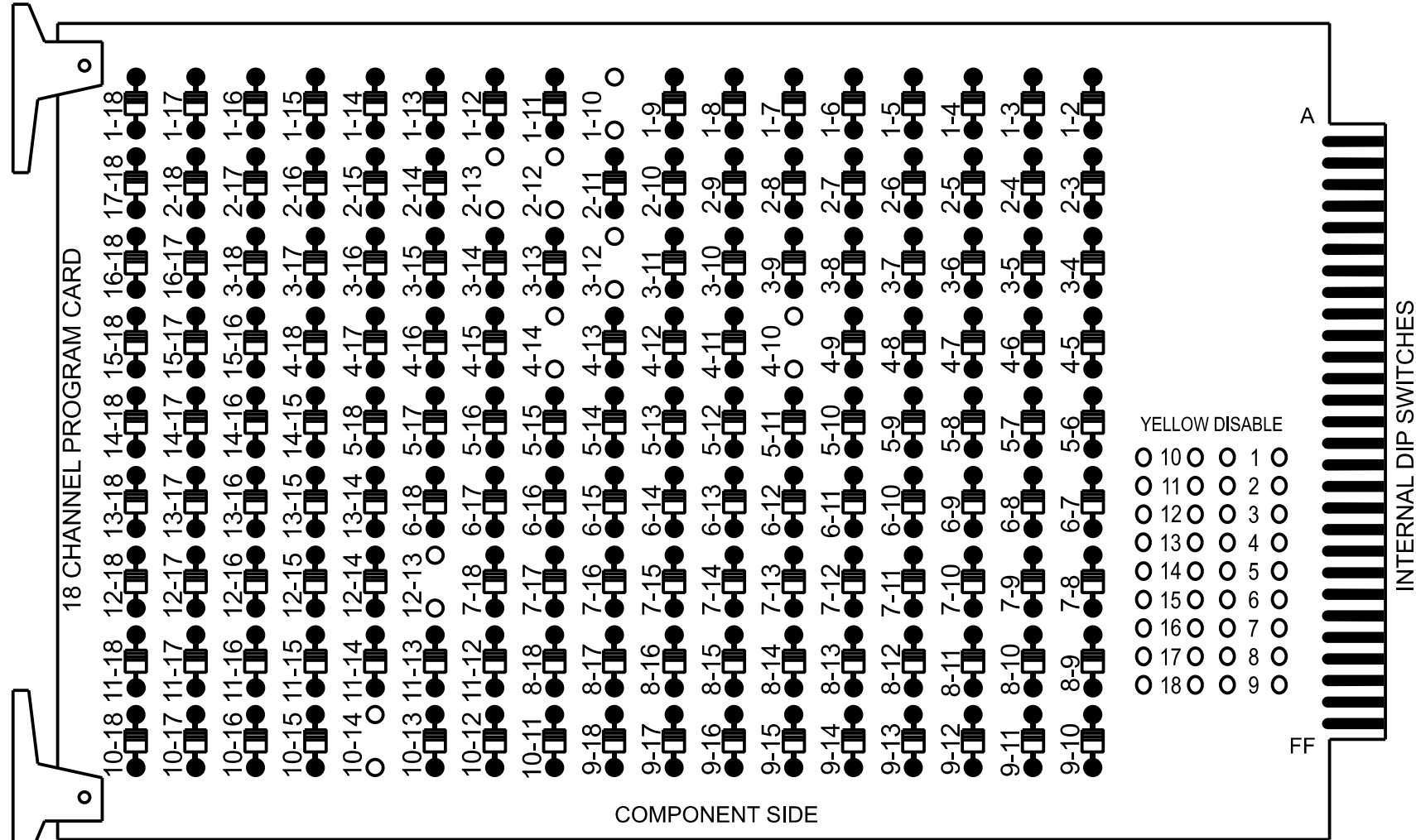


18 CHANNEL CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-10, 2-12, 2-13, 3-12, 4-10, 4-14, 10-14, and 12-13.



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 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.
- 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 D13-24_Rutherfordton System.

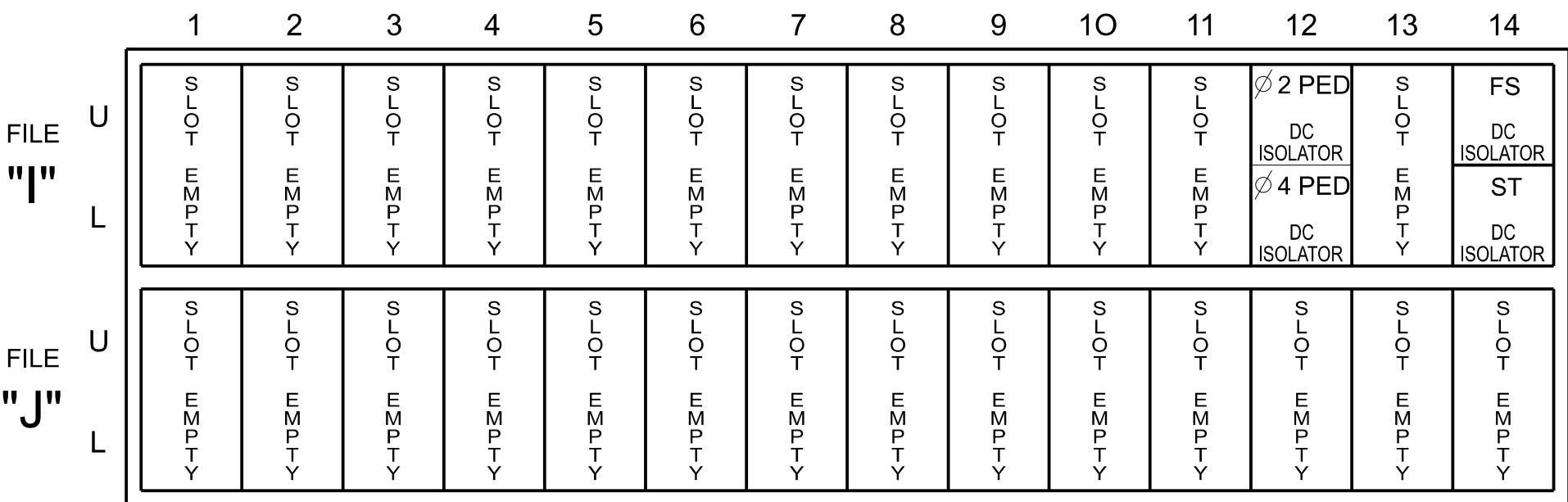
EQUIPMENT INFORMATION

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, AUX S2, AUX S5
Phases Used.....1, 2, 2PED, 3, 4, 4PED
Overlap "1".....Not Used
Overlap "2".....*
Overlap "3".....Not Used
Overlap "4".....*

*See overlap programming detail on sheet 2

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
ST = STOP TIME

SPECIAL DETECTOR NOTE

Install a multizone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

SDLC NON-INTRUSIVE DETECTION CHART

Detector Rack #3		
Input Point	Det # (Index)	Detector Zone
1	33	1A
2	34	3A
3	35	NU
4	36	NU
5	37	NU
6	38	2A
7	39	2B
8	40	NU
9	41	NU
10	42	NU
11	43	NU
12	44	3B
13	45	3C
14	46	4A
15	47	4B
16	48	NU

NU = Not Used

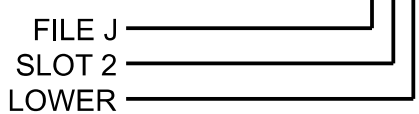
INPUT FILE CONNECTION & PROGRAMMING CHART

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			X		X	
2A	-	-	-	*	38	2			X		X	
2B	-	-	-	*	39	2			X		X	
3A	-	-	-	*	34	3	3.0		X		X	
3B	-	-	-	*	44	3	15.0		X		X	
3C	-	-	-	*	45	3	15.0		X		X	
4A	-	-	-	*	46	4	5.0		X		X	
4B	-	-	-	*	47	4	15.0		X		X	
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.

*For Input Point numbers, see SDLC Non-Intrusive Detection Chart this sheet.

INPUT FILE POSITION LEGEND: J2L



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	12	21	22	P21, P22	31	32	41	42	P41, P42	NU	NU	NU	NU	NU	13	NU	23
RED	125	125	128	128		116	116	101	101							A124		A101
YELLOW	126	126	129	129		117	117	102	102									
GREEN	127	127	130	130		118	118	103	103									
RED ARROW																		
YELLOW ARROW																A125		A102
FLASHING YELLOW ARROW																A126		A103
GREEN ARROW	127	130				118		103										
Hand icon						113				104								
Walking person icon						115				106								

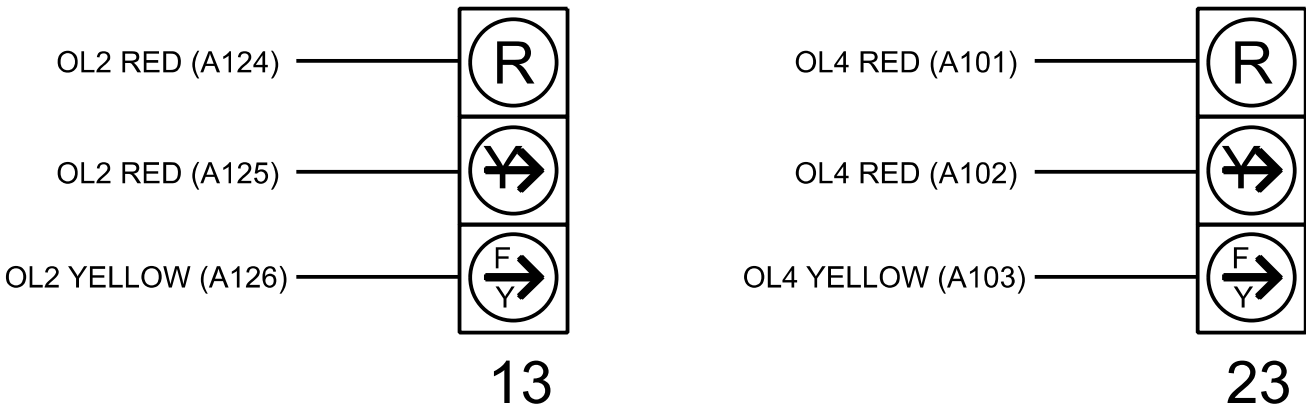
NU = Not Used

* Denotes install load resistor. See load resistor installation detail this sheet.

*See pictorial of head wiring in detail this sheet.

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.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 13-0183T1
DESIGNED: FEBRUARY 2026
SEALED: 05/12/2026
REVISED:

Signal Upgrade -
Electrical Detail - Sheet 1 of 2
(Construction Phase 1)

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:		US 221 Alt-US 74 Bus (Charlotte Rd)/NC 108 (Washington St) at US 221 (Main St)/US 221-74 Bus		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031464 N. R. SIMMONS	
Prepared for the Offices of:		Division 13 Rutherford County Rutherfordton		REVISIONS	
PLAN DATE: February 2026		REVIEWED BY: N. K. Vianich		INIT.	
PREPARED BY: E.E. Tiller		REVIEWED BY: N. R. Simmons		DATE	
750 N. Greenfield Pkwy, Garner, NC 27529		Signature of <i>Natasha R. Simmons</i>		DATE	
HNTB NORTH CAROLINA, P.C. 4000 Center at North Hills St Suite 500 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997		5/12/2026		SIG. INVENTORY NO. 13-0183T1	