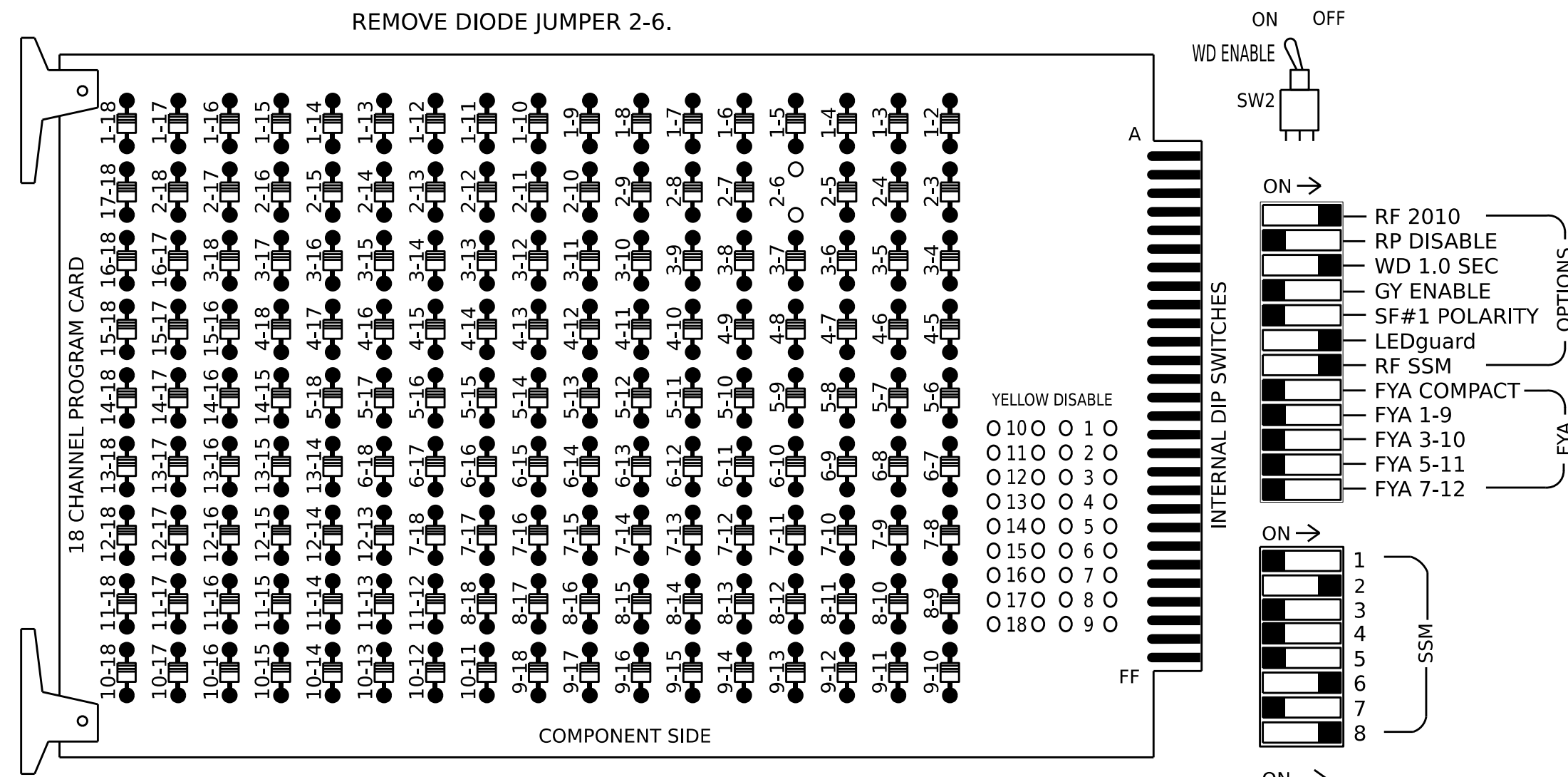


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumper and set switches as shown)

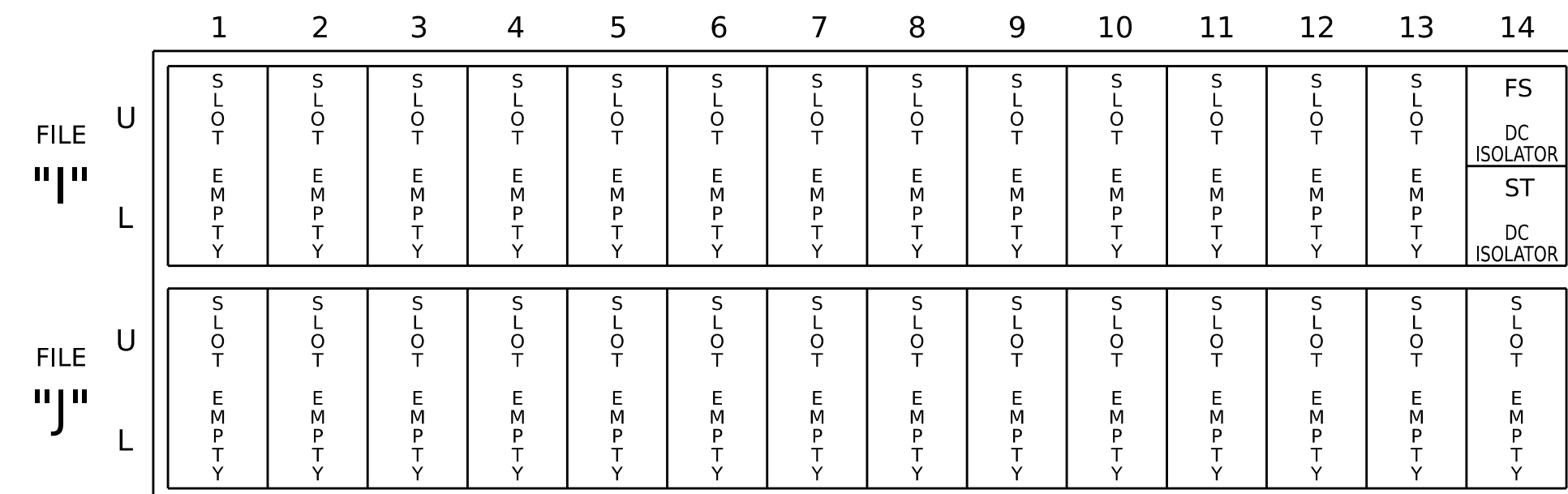


NOTES:

- 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.

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
ST = STOP TIME

SPECIAL DETECTOR NOTE

Install a multi-zone 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.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-0308T3
DESIGNED: December 2025
SEALED: 04/09/2026
REVISED: N/A

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 Plans.
- Program controller to start up in phases 2 and 6 Green.
- Enable simultaneous gap-out feature for all phases.
- The cabinet and controller are part of the Hickory Signal System.

EQUIPMENT INFORMATION

Controller..... 2070
Cabinet..... 332 w/ Aux
Software..... SE-PAC2070
Cabinet Mount..... Base
Output File Positions..... 18 With Aux. Output File
Load Switches Used..... S2, S8, S11,
Phases Used..... 2, 4, 6, 8
Overlaps..... NONE

^Phase used for timing only

ALL RED FLASH STARTUP PROGRAMMING DETAIL

(program controller as shown below)

- From Main Menu select **4-UNIT DATA**
- From UNIT DATA Submenu select **1-STARTUP & MISC**

```
STARTUP & MISC
STARTUP TIME.: 6 (SEC) STATE: 2 (0-FL
RED REV/10...: 40 (TSEC)           1-RED
AUTO PED CLR.: 0 (0-NO 1-YES)      2-RAF)
STOP T RESET.: 0 (0-NO 1-YES)
SEQUENCE.....: 1 (1-19)
SPECIAL SEQ  : 0 (SEE HELP)
```

STARTUP PROGRAMMING COMPLETE

INIT & N.A. RESP PROGRAMMING DETAIL

(program controller as shown below)

- From Main Menu select **3-PHASE DATA**
- From PHASE DATA Submenu select **4-INIT & N.A. RESP+**

```
PHASE.....1...2...3...4...5...6...7...8
INITIAL  0  4  0  1  0  4  0  1
NA RESP  0  1  0  2  0  1  0  2
UPDT GRN 0  0  0  0  0  0  0  0
CODES...0...1...2...3...4...5...6
INIL    NONE INACT RED YEL GRN DRK G/DW
NA RSP  NONE NA1 NA2 1&2 -----
```

INIT & N.A. RESP PROGRAMMING COMPLETE

Notice phases 1, 3, 5 & 7 not used!

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.	NU	21,22	NU	NU	NC	NU	NU	61	62	NU	NU	81,82	NU	NU	NU	NU	NU	NU
RED		128						134	134									
YELLOW		129						135	135									
GREEN		130							136									
RED ARROW																		107
YELLOW ARROW																		108
FLASHING YELLOW ARROW																		
GREEN ARROW								136										109

NU = Not Used
NC = Not Connected

REMOTE FLASH PROGRAMMING DETAIL

(program controller as shown below)

- From Main Menu select **4-UNIT DATA**
- From UNIT DATA Submenu select **2-FLASH**
- From FLASH Submenu select **1-REMOTE FLASH SETTINGS**

```
REMOTE FLASH SETTINGS    TEST-A FLASH: 0
LDSW:123456789 0123456789 0123456789 012
FLSH:010000010 010000000 000000000 000
ALT:010000000 000000000 000000000 000
0-DARK 1-RED 2-YELLOW 3-STEADY YELLOW
```

PRESS 'F' TO RETURN TO FLASH

- From REMOTE FLASH Submenu select **2-REMOTE FLASH ENTRY/EXIT PHASES**

```
REMOTE FLASH ENTRY/EXIT PHASES
PHASES: 12345678 90123456
ENTRY:  01000100 00000000
EXIT:   01000100 00000000
```

REMOTE FLASH PROGRAMMING COMPLETE

Electrical Detail - (TMP Phase 6) - Sheet 1 of 1

Electrical and Programming Details For: **1-40 EB Ramp at SR 1007 (Lenoir Rhyme Blvd) & SR 1534 (8th St SE)(West Intersection)**

Division 12 Catawba County Hickory

Prepared in the Offices of: **Tim Langston**

PLAN DATE: **April 2026** REVIEWED BY:

PREPARED BY: **Tim Langston** REVIEWED BY:

REVISIONS

NO.	DESCRIPTION	INIT.	DATE

750 N. Greenfield Pkwy, Garner, NC 27529

Seal: **D. Todd Joyce**, Professional Engineer, No. 031001, State of North Carolina

DocuSigned by: **D. Todd Joyce**, 04/10/2026

SIG. INVENTORY NO. 12-0308T3