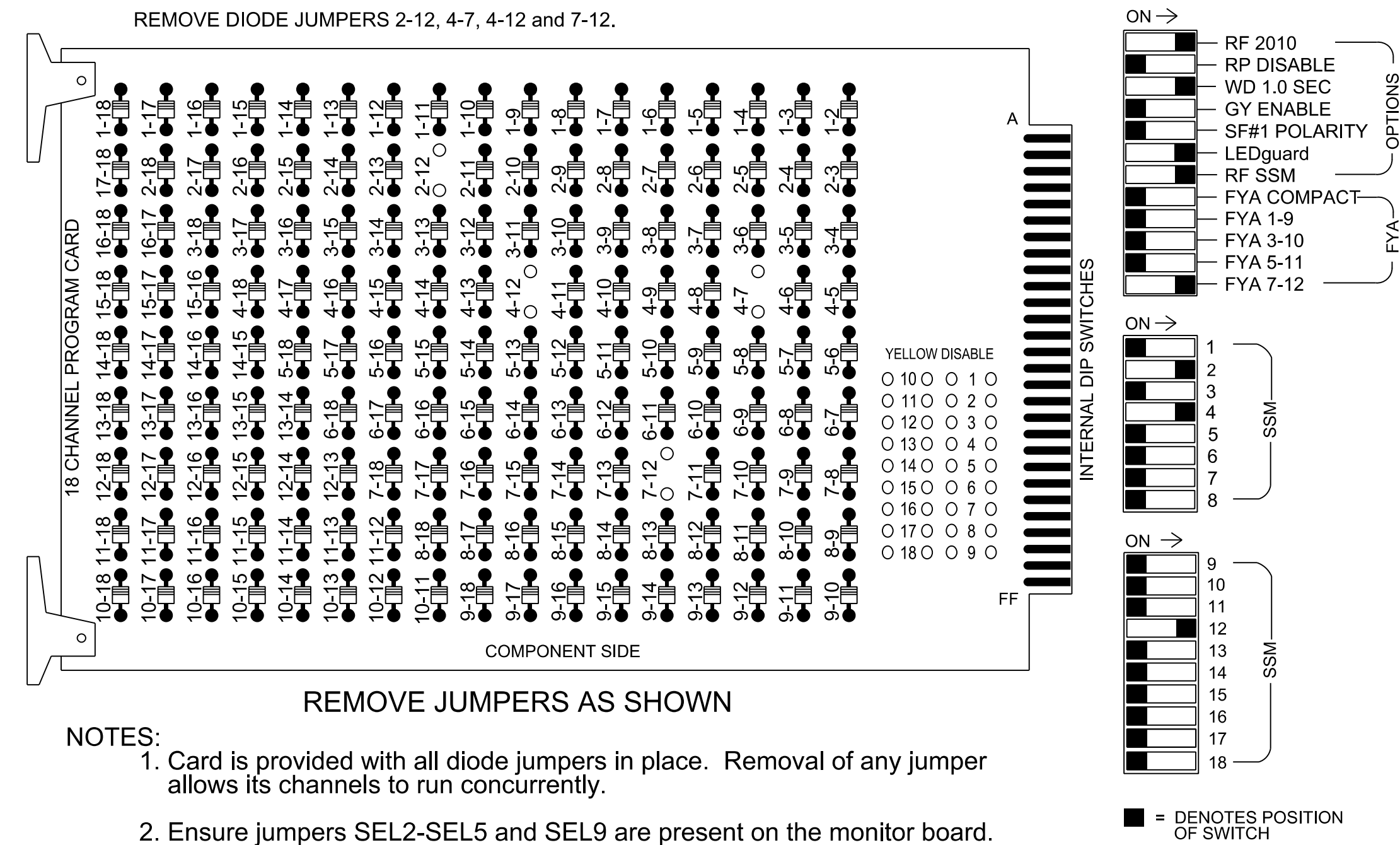


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



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.
- Return controller to Factory Defaults before programming per this electrical detail.
- 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.

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.....S2, S5, S10, AUX S5
 Phases Used.....2, 4, 7
 Overlap "1".....NOT USED
 Overlap "2".....NOT USED
 Overlap "3".....NOT USED
 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. | NU | 21,22 | NU | NU | 41,42 | NU | NU | NU | NU | 71* | NU | NU | NU | NU | NU | NU | 71* | NU |
| RED | | 128 | | | 101 | | | | | | | | | | | | | |
| YELLOW | | 129 | | | | | | | | * | | | | | | | | |
| GREEN | | | | | | | | | | | | | | | | | | |
| RED ARROW | | | | | | | | | | | | | | | | | | A101 |
| YELLOW ARROW | | | | | | | | | | | | | | | | | | A102 |
| FLASHING YELLOW ARROW | | | | | | | | | | | | | | | | | | A103 |
| GREEN ARROW | | 130 | | | 103 | | | | | 124 | | | | | | | | |

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)

| FILE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|------|---|---|---|---|----------|---|---|---|---|----|----|----|----|-------------|
| U | S | S | S | S | S | S | S | S | S | S | S | S | S | FS |
| L | T | T | T | T | T | T | T | T | T | T | T | T | T | DC ISOLATOR |
| U | S | S | S | S | ∅ 7 | S | S | S | S | S | S | S | S | ST |
| L | T | T | T | T | 7A | T | T | T | T | T | T | T | T | DC ISOLATOR |
| | | | | | NOT USED | | | | | | | | | |

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

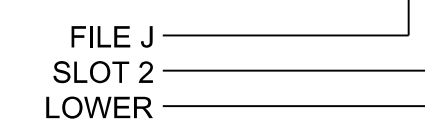
FS = FLASH SENSE
ST = STOP TIME

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 |
|----------|---------------|-----------------|---------|-------------|--------------|------------|------------|-------------|--------|---------------|------|--------------------|
| 7A | TB5-5,6 | J5U | 57 | 19 | 21★ | 7 | 15 | | X | | X | |

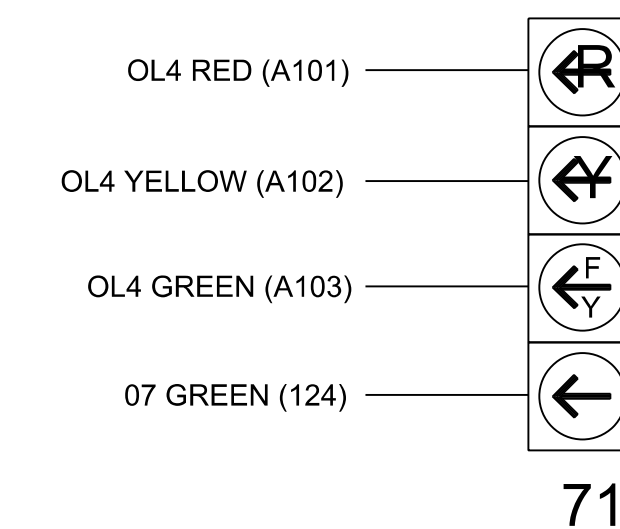
★ For the detector to work as shown on the signal design plan, see the vehicle detector setup programming detail for alternate phasing on sheet 2.

INPUT FILE POSITION LEGEND: J2L



FYA SIGNAL WIRING DETAIL

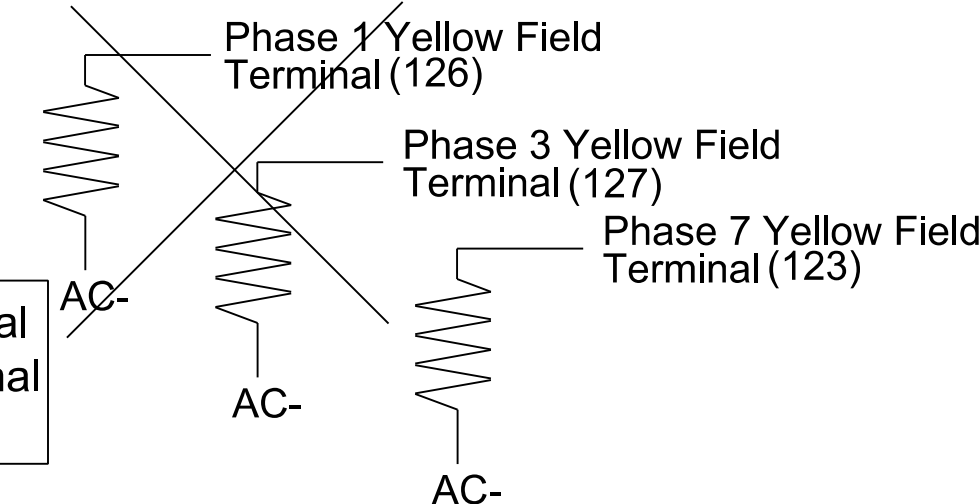
(wire signal heads as shown)



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) |



Remove Phase 1 Yellow Field Terminal (126) and Phase 3 Yellow Field Terminal (117) if present.

SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection for zones. 2A, 4A and 7A. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

For Detection Zone 7A, the equipment placement and slots are typical for a NCDOT installation. Inputs associated with these slots are compatible with time of day instructions located on sheet 2 of this electrical detail.

Signal Upgrade - Temporary Design 5
(TMP Phase III Step 5) Electrical Detail - Sheet 1 of 2

Electrical and Programming Details For:

Prepared for the Offices of:

US 158 EB (Reidsville Rd.) at SR 2385 (Darrow Road)

Division 9 Forsyth County Walkertown

PLAN DATE: February 2024 REVIEWED BY: DT Sears

PREPARED BY: WP Erickson-Jones REVIEWED BY:

REVISIONS INIT. DATE

750 N. Greenfield Pkwy, Garner, NC 27529

Seal: PORTER JONES ENGINEER

DocuSigned by: Porter Jones 2/12/2024

SIG. INVENTORY NO. 09-0996T5

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