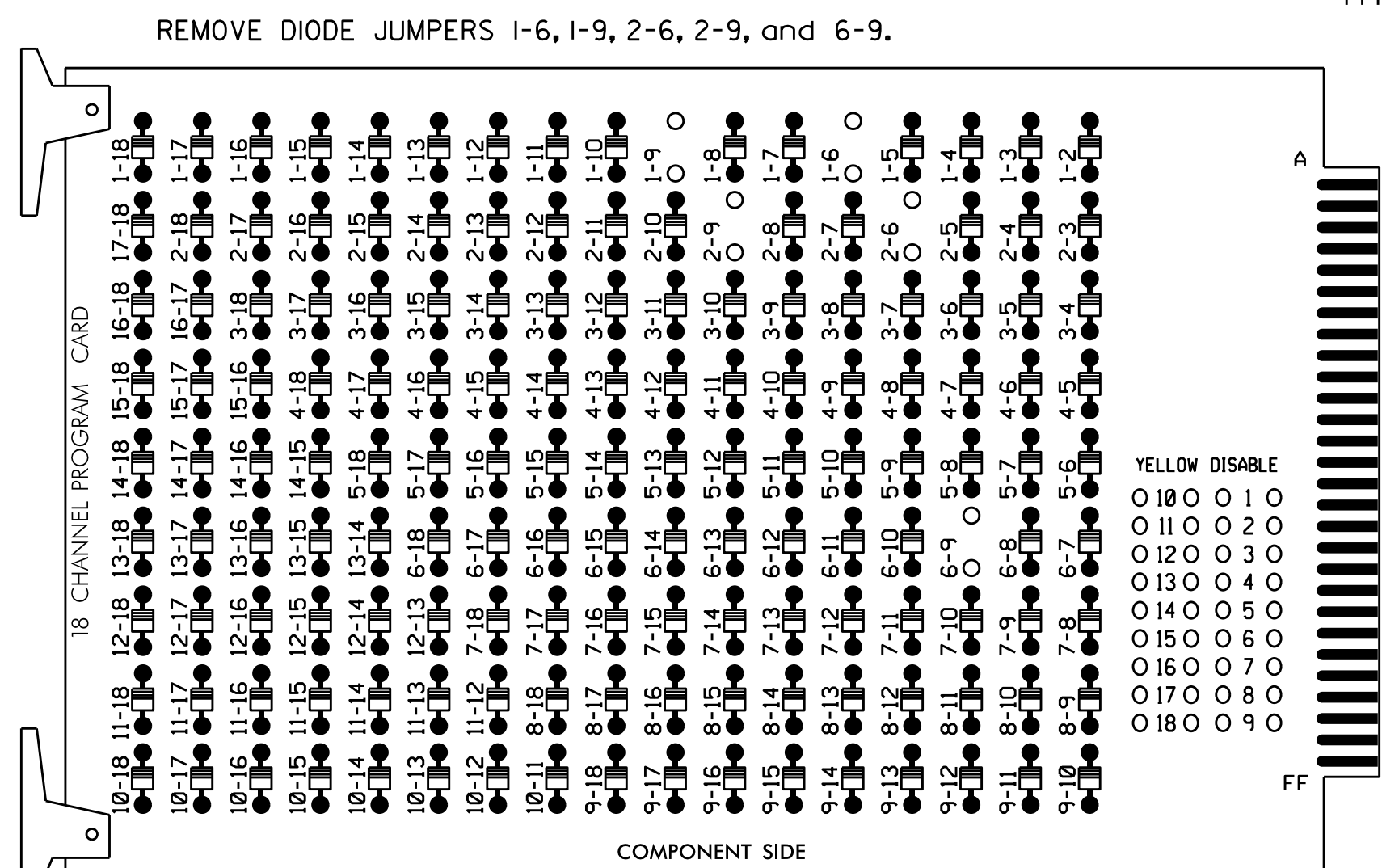


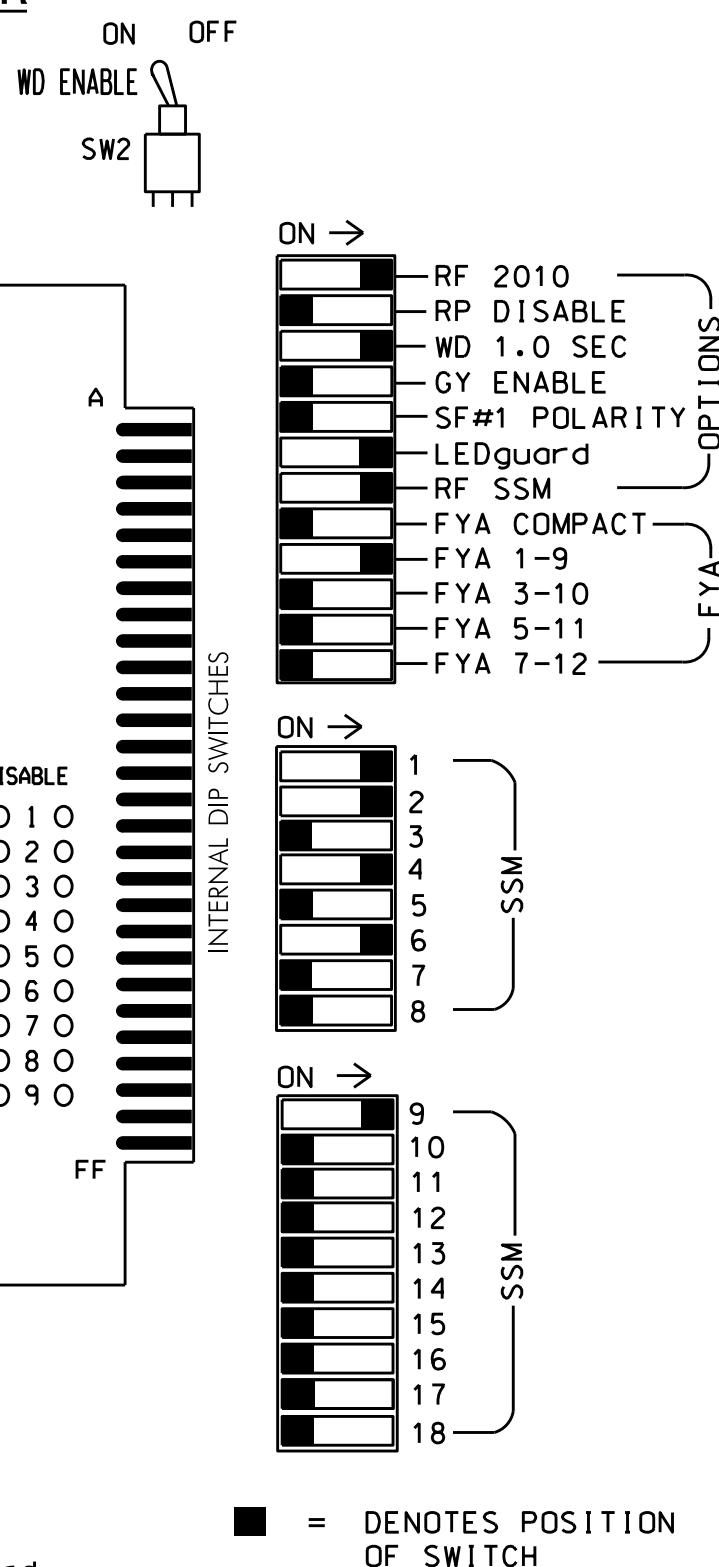
EDI MODEL 2018EClip-NC CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers 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 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 Plans.
- Enable Simultaneous Gap-Out for all phases.
- Program phases 2 and 6 for volume density operation.
- Program controller to start up in phase 2 Green and 6 Green.
- The cabinet and controller are part of the Fayetteville Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....332 W/AUX
SOFTWARE.....ECONOLITE ASC/3-2070
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX OUTPUT FILE
LOAD SWITCHES USED.....S1,S2,S5,S8,AUX S1
PHASES USED.....1,2,4,6
OVERLAP "A".....*
OVERLAP "B".....NOT USED
OVERLAP "C".....NOT USED
OVERLAP "D".....NOT USED

* See overlap programming detail below.

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 | OLA | OLB | SPARE | OLC | OLD | SPARE | |
| SIGNAL HEAD NO. | 11 | 42 | 21,22 | NU | NU | 41,42 | NU | NU | 61,62 | NU | NU | NU | 11 | NU | NU | NU | NU | NU | |
| RED | * | 128 | | | | 101 | | | 134 | | | | | | | | | | |
| YELLOW | | | 129 | | | 102 | | | 135 | | | | | | | | | | |
| GREEN | | | 130 | | | 103 | | | 136 | | | | | | | | | | |
| RED ARROW | | | | | | | | | | | | | | | | | | A121 | |
| YELLOW ARROW | | 126 | | | | | | | | | | | | | | | | | A122 |
| FLASHING YELLOW ARROW | | | | | | | | | | | | | | | | | | | A123 |
| GREEN ARROW | 127 | 127 | | | | | | | | | | | | | | | | | |

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 U | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|
| U | ∅ 1 | ∅ 1 | ∅ 1 | ∅ 1 | ∅ 1 | ∅ 4 | ∅ 1 | ∅ 1 | ∅ 1 | ∅ 1 | ∅ 1 | ∅ 1 | ∅ 1 | FS |
| L | 1A | 1B | ∅ 2 | ∅ 2 | ∅ 2 | 4A | ∅ 4 | ∅ 4 | ∅ 4 | ∅ 4 | ∅ 4 | ∅ 4 | ∅ 4 | DC ISOLATOR |
| U | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | ∅ 6 | PRE1 |
| L | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | 6A,6B | AC ISOLATOR |
| | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED |

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

FS = FLASH SENSE
ST = STOP TIME
PRE1 = RR PREEMPT

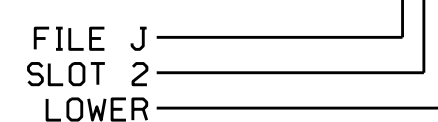
⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

| LOOP NO. | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | DETECTOR NO. | NEMA PHASE | CALL | EXTEND TIME | DELAY TIME | DETECTOR TYPE |
|----------|---------------|-----------------|---------|--------------|------------|------|-------------|------------|---------------|
| 1A | TB2-1,2 | I1U | 56 | 1 | 1 | YES | | 15 | S |
| | | J4U | 48 | 26 | 6 | YES | | 3 | G |
| 1B | TB2-5,6 | I2U | 39 | 2 | 1 | YES | | 15 | S |
| 2A,2B | TB2-7,8 | I2L | 43 | 12 | 2 | YES | | | N |
| 4A | TB4-9,10 | I6U | 41 | 4 | 4 | YES | | | S |
| 4B | TB4-11,12 | I6L | 45 | 14 | 4 | YES | | | S |
| 6A,6B | TB3-5,6 | J2U | 40 | 6 | 6 | YES | | | N |

¹Add jumper from I1-W to J4-W, on rear of input file.

INPUT FILE POSITION LEGEND: J2L



ECONOLITE ASC/3-2070 OVERLAP PROGRAMMING DETAIL

(program controller as shown)

- From Main Menu select **2. CONTROLLER**
- From CONTROLLER Submenu select **2. VEHICLE OVERLAPS**

OVERLAP A

Select TMG VEH OVLP [A] and 'PPLT FYA'

TMG VEH OVLP...[A] TYPE: ... [PPLT FYA]

PROTECTED LEFT TURN.... PHASE 1
OPPOSING THROUGH..... PHASE 2

FLASHING ARROW OUTPUT....CH9 ISOLATE

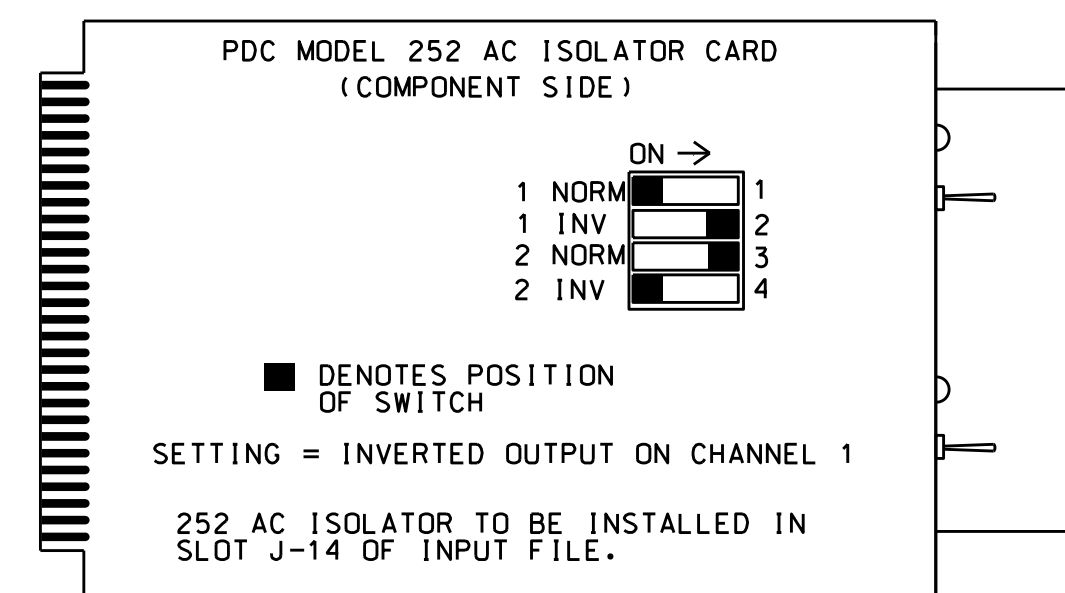
DELAY START OF: FYA..0.0 CLEARANCE..0.0

ACTION PLAN SF BIT DISABLE..... 0

END PROGRAMMING

PREEMPT 1 AC ISOLATOR (MODEL 252) OUTPUT PROGRAMMING DETAIL

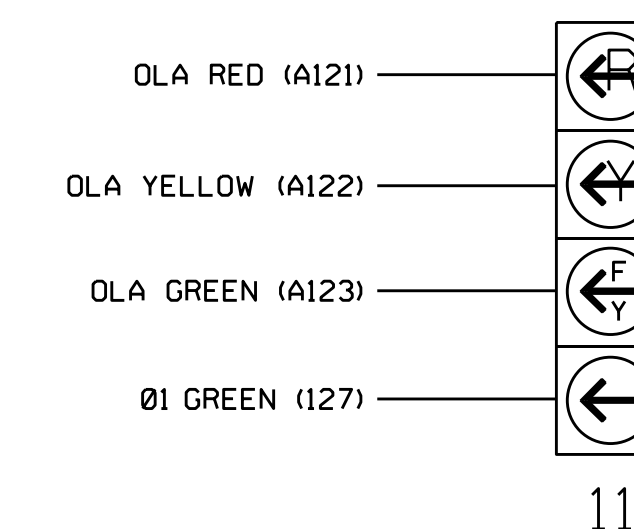
(set DIP switches as shown below)



NOTE: IF ANOTHER MANUFACTURER TYPE OF AC ISOLATOR IS USED, OUTPUT PROGRAMMING IS LIKELY NOT TO EQUATE TO THAT SHOWN ABOVE.

FYA SIGNAL WIRING DETAIL

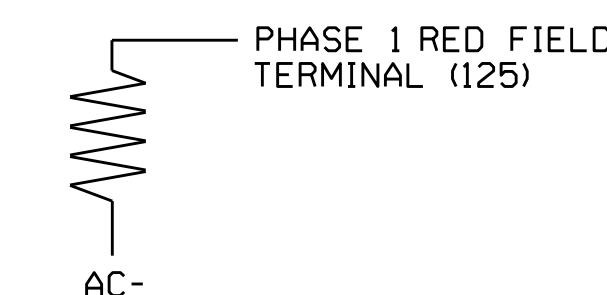
(wire signal head as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)

| VALUE (ohms) | WATTAGE |
|--------------|-----------|
| 1.5K - 1.9K | 25W (min) |
| 2.0K - 3.0K | 10W (min) |



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 06-0052
DESIGNED: November 2015
SEALED: 3/14/2016
REVISED: N/A

Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
STATE OF NORTH CAROLINA
Signal Management Section
750 N. Greenfield Pkwy, Garner, NC 27529

US 401 Business (Robeson St) at SR 1168 (Whitfield St)

Division 6 Cumberland County Fayetteville
PLAN DATE: March 2016 REVIEWED BY: BAS
PREPARED BY: S. Armstrong REVIEWED BY:
REVISIONS INIT. DATE
Sealed by: Keith M. Mims 10/6/2016
SIC. INVENTORY NO. 06-0052