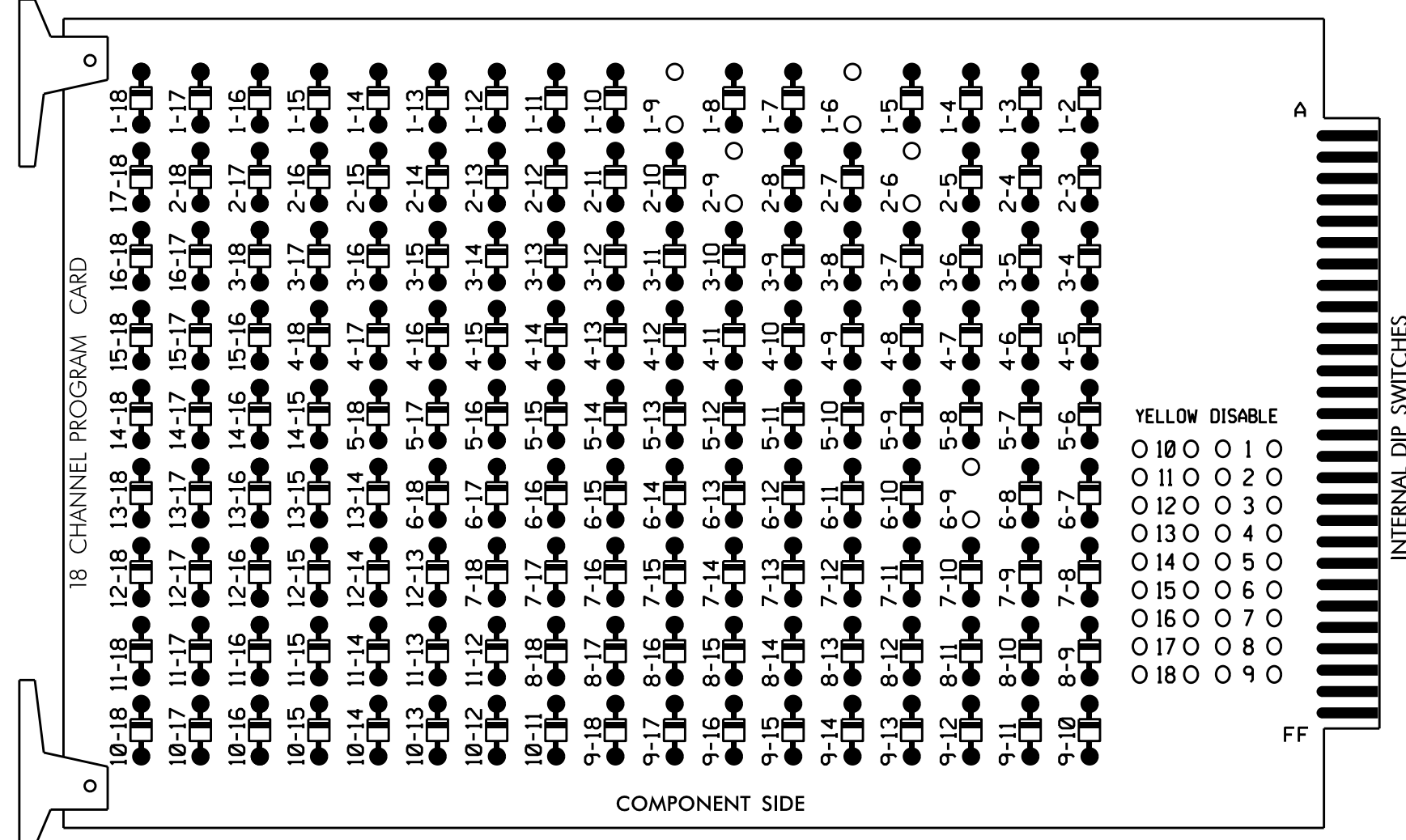


PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

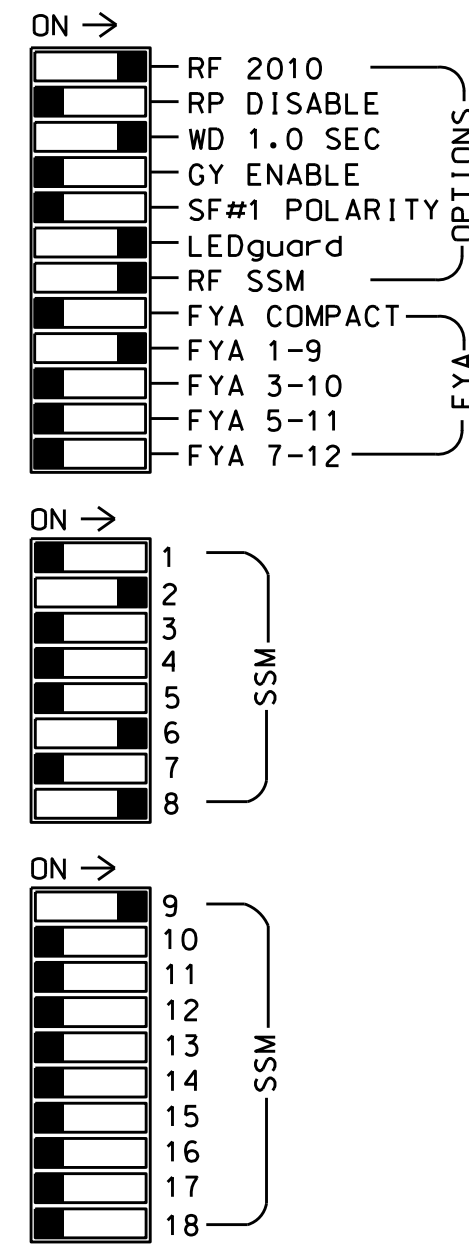
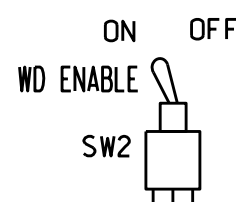
REMOVE DIODE JUMPERS 1-6, 1-9, 2-6, 2-9, and 6-9.



REMOVE JUMPERS AS SHOWN

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.



■ = DENOTES POSITION OF SWITCH

NOTES

1. 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.
2. Enable Simultaneous Gap-Out for all Phases.
3. Program phases 2 and 6 for Variable Initial and Gap Reduction.
4. Program phases 2 and 6 for Startup In Green.
5. Program phases 2 and 6 for Yellow Flash, and overlap 1 as Wag Overlaps.

EQUIPMENT INFORMATION

CONTROLLER.....2070  
 CABINET.....332 W/ AUX  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE  
 LOAD SWITCHES USED.....S1,S2,S8,S11,AUX S1  
 PHASES USED.....1,2,6,8  
 OVERLAP "A".....1+2  
 OVERLAP "B".....NOT USED  
 OVERLAP "C".....NOT USED  
 OVERLAP "D".....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 | OLA    | OLB    | SPARE  | OLC    | OLD    | SPARE  |
| SIGNAL HEAD NO.       | 11  | 21,22 | NU    | NU | NU | NU    | NU | 61,62 | NU    | NU  | 81,82 | NU    | 11     | NU     | NU     | NU     | NU     | NU     |
| RED                   |     | 128   |       |    |    |       |    | 134   |       |     |       |       |        |        |        |        |        |        |
| YELLOW                | *   | 129   |       |    |    |       |    | 135   |       |     |       |       |        |        |        |        |        |        |
| GREEN                 |     | 130   |       |    |    |       |    | 136   |       |     |       |       |        |        |        |        |        |        |
| RED ARROW             |     |       |       |    |    |       |    |       |       |     | 107   |       | A121   |        |        |        |        |        |
| YELLOW ARROW          |     |       |       |    |    |       |    |       |       |     | 108   |       | A122   |        |        |        |        |        |
| FLASHING YELLOW ARROW |     |       |       |    |    |       |    |       |       |     |       |       | A123   |        |        |        |        |        |
| GREEN ARROW           | 127 |       |       |    |    |       |    |       |       |     | 109   |       |        |        |        |        |        |        |

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    | ∅ 1      | ∅ 2      | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | FS          |
| L    | 1A       | 2A       | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | DC ISOLATOR |
| U    | NOT USED | NOT USED | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | ST          |
| L    | NOT USED | NOT USED | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | DC ISOLATOR |
| U    | S        | ∅ 6      | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | S           |
| L    | NOT USED | 6A       | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S        |
| U    | NOT USED | NOT USED | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S        |
| L    | NOT USED | NOT USED | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S | -O-S        |

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

FS = FLASH SENSE  
 ST = STOP TIME

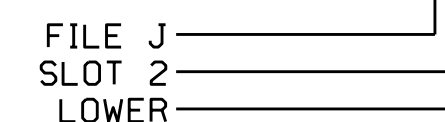
⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

| LOOP NO.        | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | INPUT ASSIGNMENT NO. | DETECTOR NO. | NEMA PHASE | CALL | EXTEND | FULL TIME DELAY | STRETCH TIME | DELAY TIME |
|-----------------|---------------|-----------------|---------|----------------------|--------------|------------|------|--------|-----------------|--------------|------------|
| 1A <sup>1</sup> | TB2-1,2       | I1U             | 56      | 18                   | 1            | 1          | Y    | Y      |                 |              | 15         |
|                 | -             | J4U             | 48      | 10                   | 26           | 6          | Y    | Y      | Y               |              | 3          |
| 2A              | TB2-5,6       | I2U             | 39      | 1                    | 2            | 2          | Y    | Y      |                 |              |            |
| 6A              | TB3-5,6       | J2U             | 40      | 2                    | 6            | 6          | Y    | Y      |                 |              |            |
| 8A              | TB5-9,10      | J6U             | 42      | 4                    | 8            | 8          | Y    | Y      |                 |              | 3          |

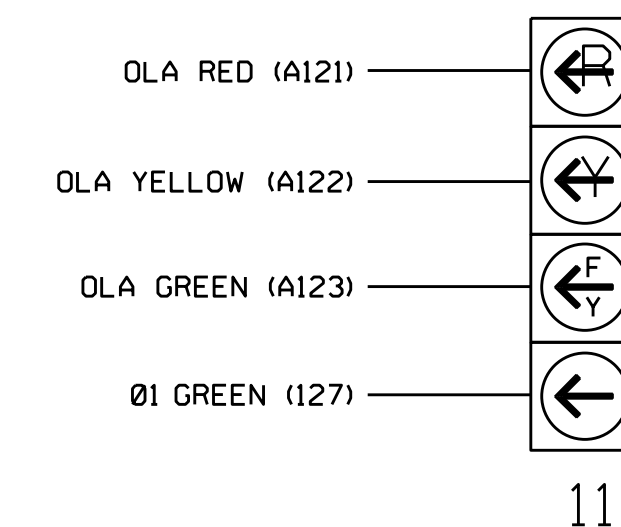
<sup>1</sup>Add jumper from I1-W to J4-W, on rear of input file.

INPUT FILE POSITION LEGEND: J2L



FYA SIGNAL WIRING DETAIL

(wire signal head as shown)



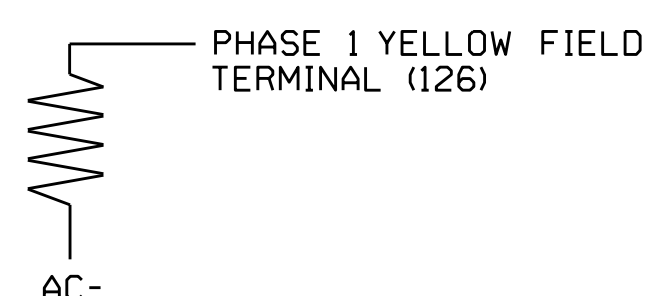
NOTE

The sequence display for signal head 11 requires special logic programming. See sheet 2 for programming instructions.

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

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



Electrical Detail - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared In the Offices of:



750 N. Greenfield Pkwy, Garner, NC 27529

NC 119  
 at  
 NC 119 Bus. (N. First Street)

Division 7 Alamance County Mebane

PLAN DATE: April 2018 REVIEWED BY:

PREPARED BY: S. Armstrong REVIEWED BY:

REVISIONS INIT. DATE

DocuSigned by: Keith M. Minus 4/9/2018

SIG. INVENTORY NO. 07-1554

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEERS  
 SEAL 036880  
 KEITH M. MINUS  
 DATE 4/9/2018