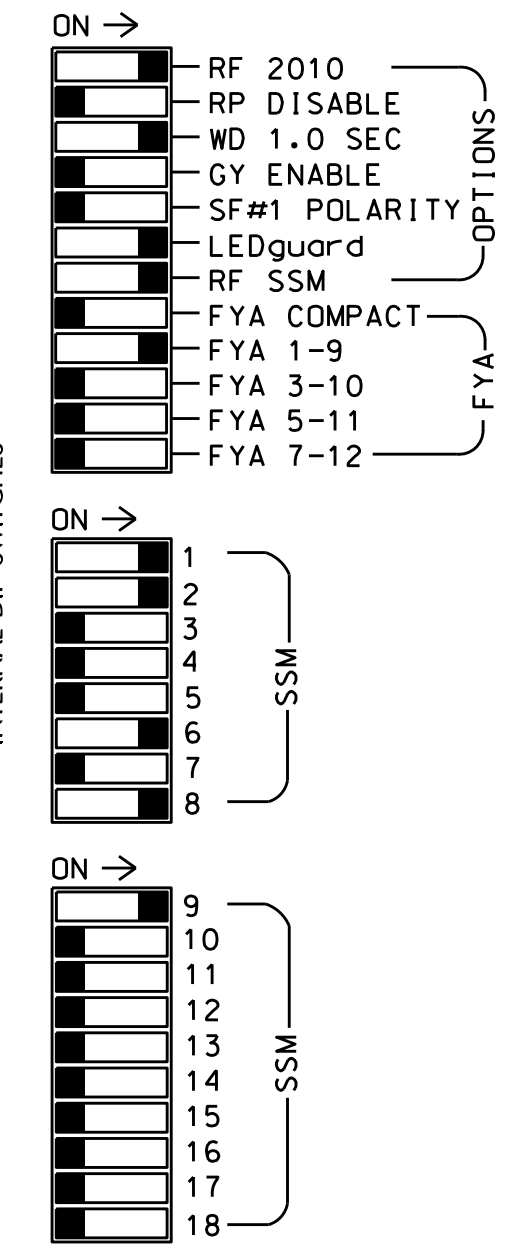
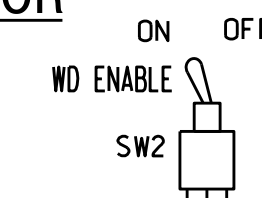
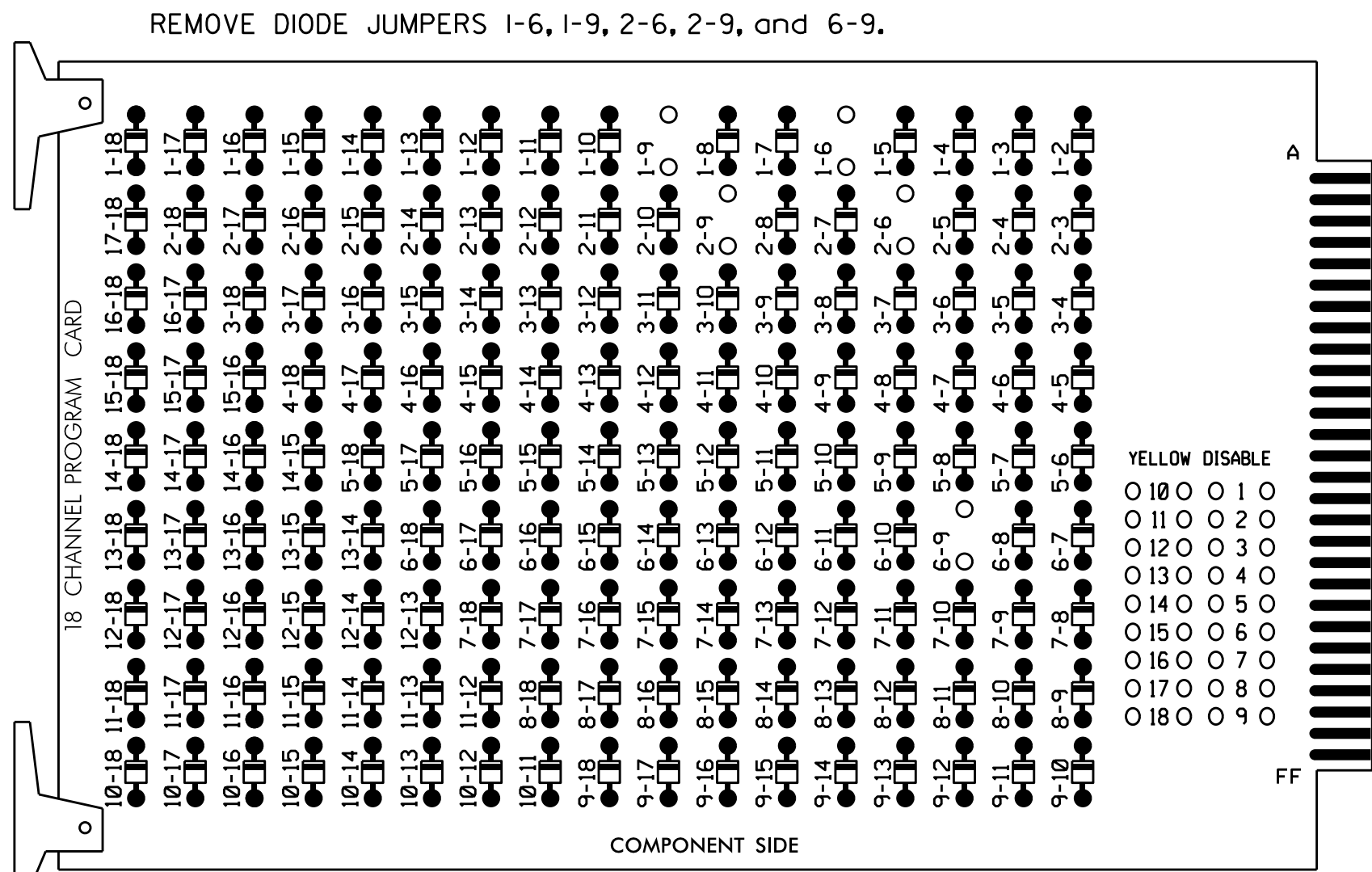


PROGRAMMING DETAIL

(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.
  - Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

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 Variable Initial and Gap Reduction.
- Program phases 2 and 6 for Start Up In Green.
- 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

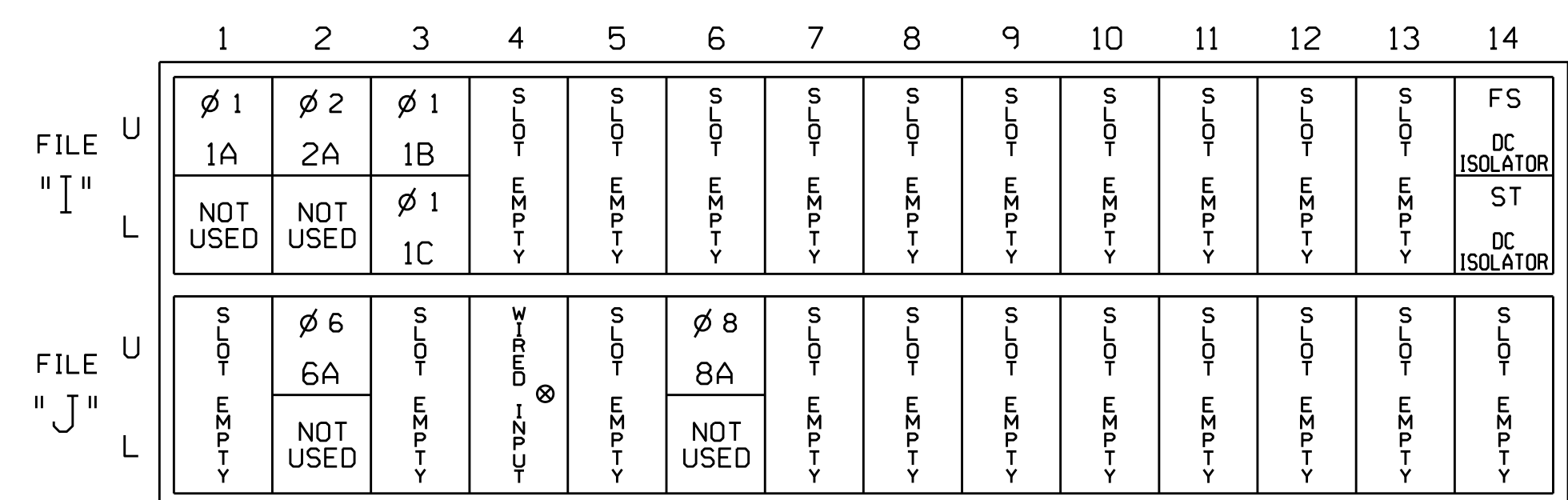
SIGNAL HEAD HOOK-UP CHART

| 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  | 82  | 21,22 | NU | NU | NU    | NU | 61,62 | NU    | NU  | 81,82 | NU    | 11     | NU     | NU     | NU     | NU     | NU     |
| RED                   | *   | 128 |       |    |    |       |    | 134   |       |     | 107   |       |        |        |        |        |        |        |
| YELLOW                |     | 129 |       |    |    |       |    | 135   |       |     | 108   |       |        |        |        |        |        |        |
| GREEN                 |     | 130 |       |    |    |       |    | 136   |       |     | 109   |       |        |        |        |        |        |        |
| 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)

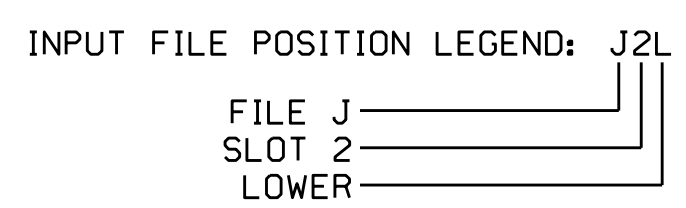


EX.: 1A, 2A, ETC. = LOOP NO.'S  
 FS = FLASH SENSE  
 ST = STOP TIME  
 ⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

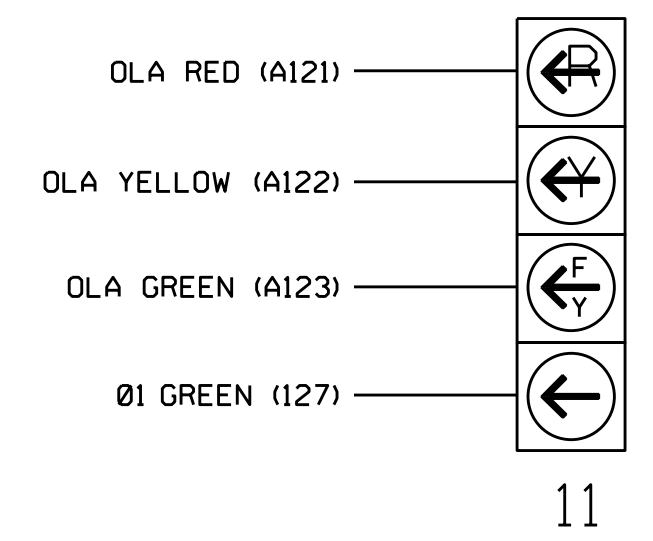
| LOOP NO.        | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | INPUT ASSIGNMENT NO. | DETECTOR NO. | NEMA PHASE | CALL | EXTEND | FULL TIME DELAY | STRETCH TIME | DELAY TIME |
|-----------------|---------------|-----------------|---------|----------------------|--------------|------------|------|--------|-----------------|--------------|------------|
| 1A <sup>1</sup> | TB2-1,2       | I1U             | 56      | 18                   | 1            | 1          | Y    | Y      |                 |              | 15         |
|                 | -             | J4U             | 48      | 10                   | 26           | 6          | Y    | Y      | Y               |              | 3          |
| 1B              | TB2-9,10      | I3U             | 63      | 25                   | 32           | 1          | Y    | Y      |                 |              | 15         |
| 1C              | TB2-11,12     | I3L             | 76      | 38                   | 42           | 1          | Y    | Y      |                 |              | 15         |
| 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.



FYA SIGNAL WIRING DETAIL

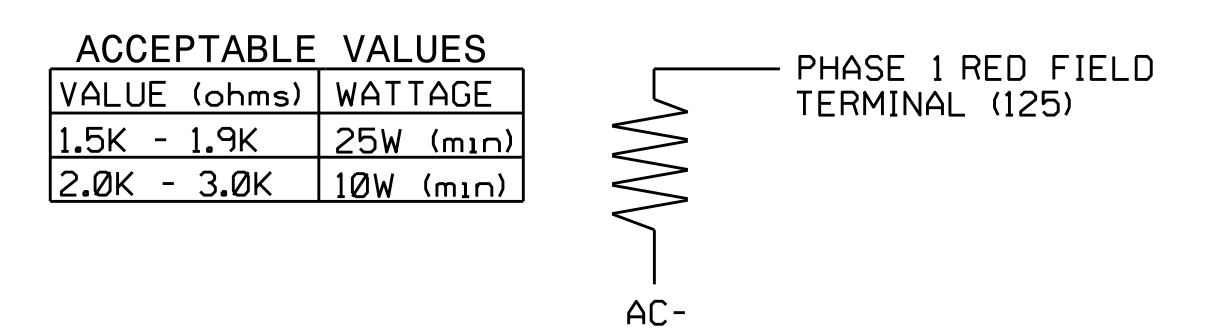
(wire signal head as shown)



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)



Electrical Detail - Temp 1 (TMP Phase I) - Sheet 1 of 2

Prepared In the Offices of:  
  
 750 N. Greenfield Pkwy, Garner, NC 27529

SR 1962 (S. Third Street) at SR 1980 (Holmes Road)

Division 7 Alamance County Mebane  
 PLAN DATE: January 2017 REVIEWED BY: BAS  
 PREPARED BY: S. Armstrong REVIEWED BY:

REVISIONS: INIT. DATE

DocuSigned by: Keith M. Mins 1/26/2017  
 2F80766EC823445 DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
  
 KEITH M. MINS  
 ENGINEER

SIG. INVENTORY NO. 07-2132T1

25-1116-2017\_05-15 S:\ITS\ASU\ITS\_Signal\work\hgr\oups\g\_Mph\mstrm\ong072132\_sml.ele.xxx.dgn sarmstrong