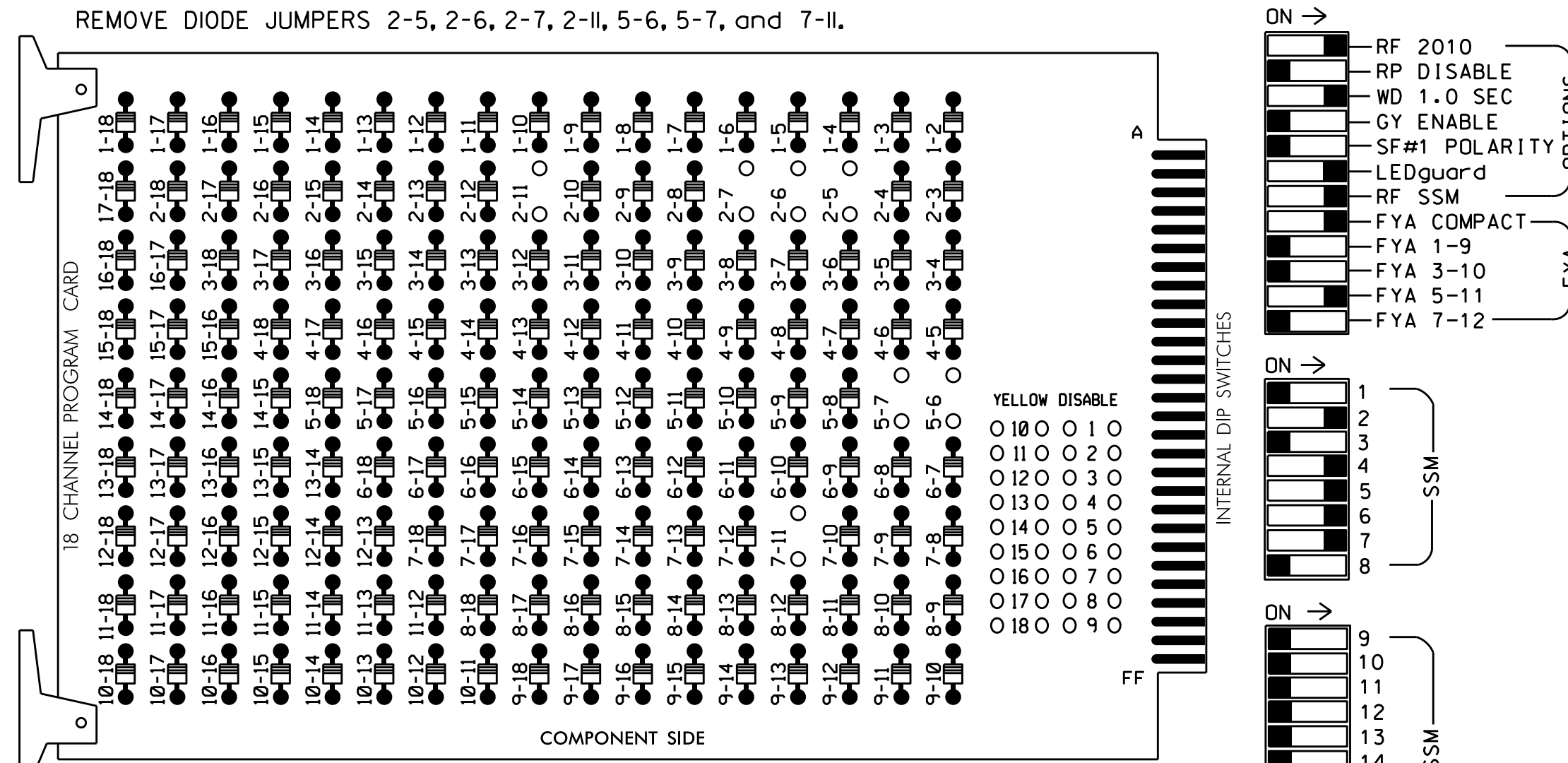


EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



REMOVE JUMPERS 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.
- Special cabinet wiring is required to utilize FYA COMPACT mode. See Ped Yellow Conflict Monitor Wiring Detail on this sheet.

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.

EQUIPMENT INFORMATION

CONTROLLER.....2070L
 CABINET.....336
 SOFTWARE.....ECONOLITE OASIS
 CABINET MOUNT.....POLE
 OUTPUT FILE POSITIONS...12
 LOAD SWITCHES USED.....S2,S5,S7,S8,S9,S10
 PHASES USED.....2,4,5,6
 OVERLAP "A".....NOT USED
 OVERLAP "B".....NOT USED
 OVERLAP "C".....5+6
 OVERLAP "D".....NOT USED
 OVERLAP "E".....5

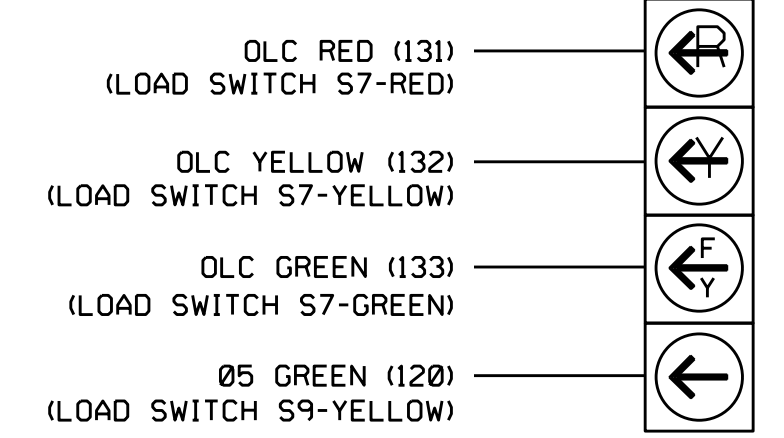
SIGNAL HEAD HOOK-UP CHART

| LOAD SWITCH NO. | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | S11 | S12 |
|-----------------------|----|-------|-------|----|----------------|-------|-----|-------|-------|-------|-----|-------|
| EMU CHANNEL NO. | 1 | 2 | 13 | 3 | 4 | 14 | 5 | 6 | 11 | 15 | 7 | 8 |
| PHASE | 1 | 2 | 2 PED | 3 | 4 | 4 PED | OLC | 6 | 5 GRN | 6 PED | OLE | 8 PED |
| SIGNAL HEAD NO. | NU | 21,22 | NU | NU | 41,42 43,44 | 62 | 51 | 61,62 | 51 | NU | 43 | NU |
| RED | | 128 | | | 101 | | | 134 | | | * | |
| YELLOW | | 129 | | | 102 | | | 135 | | | | |
| GREEN | | 130 | | | 103 | | | 136 | | | | |
| RED ARROW | | | | | | | | 131 | | | | |
| YELLOW ARROW | | | | | 102 | | | 132 | | | 123 | |
| FLASHING YELLOW ARROW | | | | | | | | 133 | | | | |
| GREEN ARROW | | | | | | 103 | | | 120 | | 124 | |
| | | | | | | | | | | | * | |

* Denotes install load resistor. See load resistor installation detail below.
 ★ See pictorial of head wiring in detail below.
 NOTE: Load Switches S7 and S9 require output remapping. See sheet 3.

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)

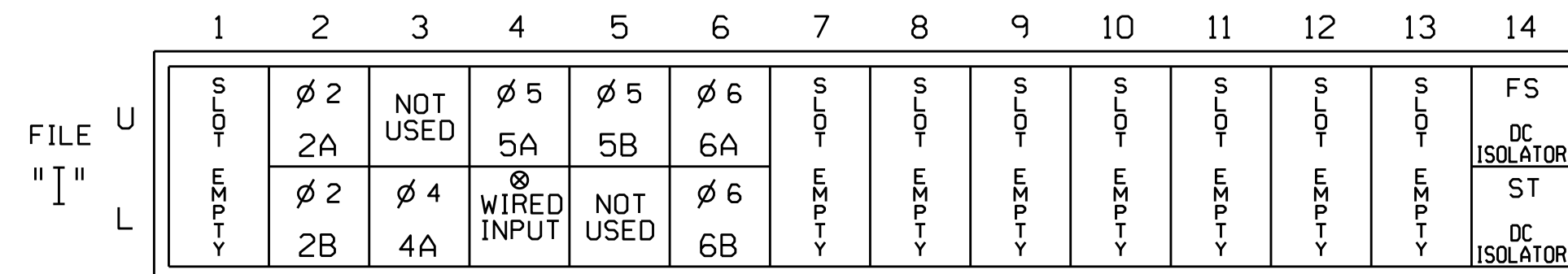


NOTE

The sequence display for signal head 51 requires special logic programming. See sheet 2 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
 ST = STOP TIME

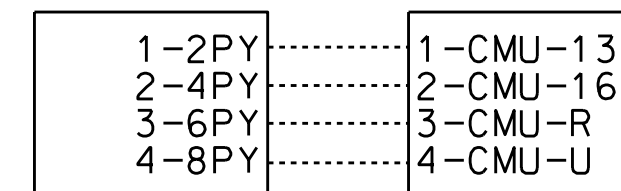
⊗ Wired Input - turn off Channel 2.

PED YELLOW CONFLICT MONITOR WIRING DETAIL

In order to use FYA COMPACT mode on the 2010ECL-NC Monitor, the cabinet must be wired such that the (unused) Ped Yellow load switch outputs are wired directly to the conflict monitor as follows: From 6 PY (field term. 120) to chan. 10 green (monitor pin R).

This may also be accomplished through a keyed plug connection found on the inside panel of the output file.

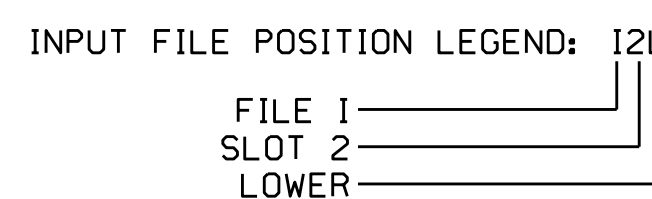
Fold down rear panel of output file and find a set of 3 white keyed connectors. Plug together the two connectors labeled as shown below:



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 |
|-----------------|---------------|-----------------|---------|----------------------|--------------|------------|------|--------|-----------------|--------------|------------|
| 2A | TB21-3,4 | I2U | 39 | 1 | 2 | 2 | Y | Y | | | |
| 2B | TB23-3,4 | I2L | 43 | 5 | 12 | 2 | Y | Y | | | |
| 4A | TB23-5,6 | I3L | 49 | 11 | 24 | 4 | Y | Y | | | 3 |
| 5A ¹ | TB21-7,8 | I4U | 41 | 3 | 4 | 5 | Y | Y | | | 15 |
| | - | I4L | 45 | 7 | 14 | 2 | Y | Y | Y | | 3 |
| 5B | TB21-9,10 | I5U | 55 | 17 | 5 | 5 | Y | Y | | | 15 |
| 6A | TB21-11,12 | I6U | 40 | 2 | 6 | 6 | Y | Y | | | |
| 6B | TB23-11,12 | I6L | 44 | 6 | 16 | 6 | Y | Y | | | |

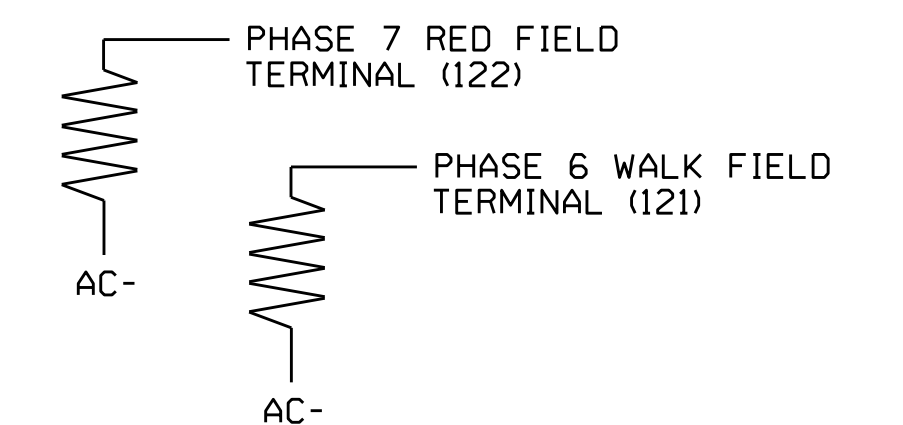
¹Add jumper from I4-F to I4-W on rear of input file.



LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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



Electrical Detail - Temporary Signal 2 (TCP Phase II) - Sheet 1 of 3

Electrical and Programming Details For: **US 421 at US 221**

Prepared In the Offices of: **Transporatio Mobility and Safety Solutions**

750 N. Greenfield Pkwy, Garner, NC 27529

Division 11 Watauga County vs Deep Gap

PLAN DATE: May 2015 REVIEWED BY: *[Signature]*

PREPARED BY: S. Armstrong REVIEWED BY:

SEAL: **JOHN T. ROWE, Jr.** ENGINEER

DocuSigned by: **John T. Rowe, Jr.** 5/26/2015

SIG. INVENTORY NO. 11-1174 T2

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 11-1174 T2
 DESIGNED: May 2015
 SEALED: 5/22/2015
 REVISED: N/A

2015-2016 05-18
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