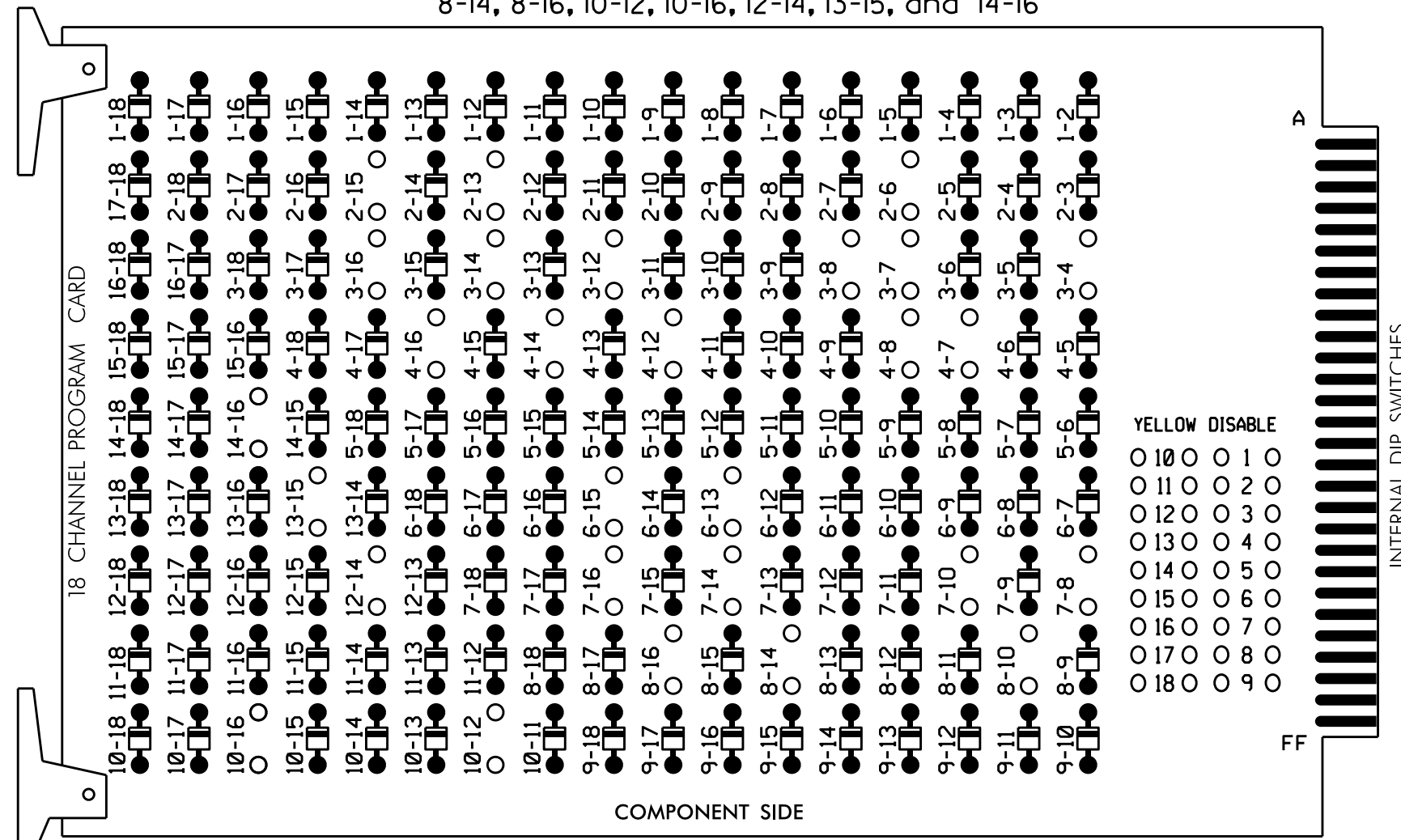


EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

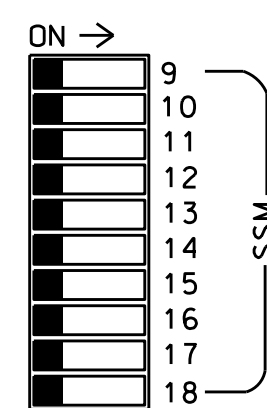
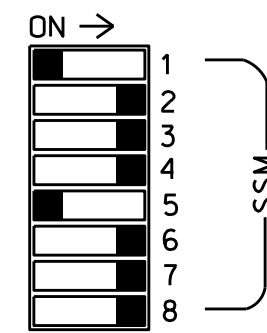
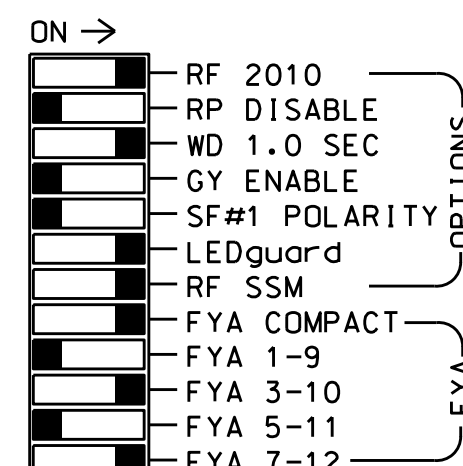
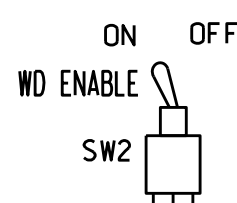
REMOVE DIODE JUMPERS 2-6, 2-13, 2-15, 3-4, 3-7, 3-8, 3-12, 3-14, 3-16, 4-7, 4-8, 4-12, 4-14, 4-16, 6-13, 6-15, 7-8, 7-10, 7-14, 7-16, 8-10, 8-14, 8-16, 10-12, 10-16, 12-14, 13-15, and 14-16



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.
- Integrate monitor with Ethernet network in cabinet.
- Special cabinet wiring is required to utilize FYA COMPACT mode. See Ped Yellow Conflict Monitor Wiring Detail on this sheet.



■ = 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.
- Program phases 4 and 8 for Dual Entry.
- Enable Simultaneous Gap-Out for all phases.
- Program phases 2 and 6 for Start Up In Green.
- Program phases 2, 4, 6 and 8 for 'STARTUP PED CALL'.
- Program phases 2 and 6 for Yellow Flash and overlap 2 as Wag Overlaps.
- The cabinet and controller are part of the Asheville Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
 CABINET.....336
 SOFTWARE.....ECONOLITE OASIS
 CABINET MOUNT.....POLE
 OUTPUT FILE POSITIONS...12
 LOAD SWITCHES USED.....S2,S3,S4,S5,S6,S8,
 S9,S10,S11,S12
 PHASES USED.....2,3,4,6,7,8
 OVERLAP "A".....NOT USED
 OVERLAP "B".....3+4
 OVERLAP "C".....NOT USED
 OVERLAP "D".....7+8

SIGNAL HEAD HOOK-UP CHART

| LOAD SWITCH NO. | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | S11 | S12 |
|-----------------------|----|-------|----------|-----|-------|-------|----------|----|-------|----------|-----|-------|
| CMU CHANNEL NO. | 1 | 2 | 13 | 3 | 4 | 10 | 14 | 5 | 6 | 15 | 7 | 16 |
| PHASE | 1 | 2 | 2 PED | OLB | 4 | 3 GRN | 4 PED | 5 | 6 | 6 PED | OLD | 8 |
| SIGNAL HEAD NO. | NU | 21.22 | P21, P22 | 31 | 41,42 | 31 | P41, P42 | NU | 61,62 | P61, P62 | 71 | 81,82 |
| RED | | 128 | | | 101 | | | | 134 | | | 107 |
| YELLOW | | 129 | | | 102 | | | | 135 | | | 108 |
| GREEN | | 130 | | | 103 | | | | 136 | | | 109 |
| RED ARROW | | | | 116 | | | | | | | 122 | |
| YELLOW ARROW | | | | 117 | | | | | | | 123 | |
| FLASHING YELLOW ARROW | | | | 118 | | | | | | | 124 | |
| GREEN ARROW | | | * | | | 105 | | | * | | | 111 |
| | | | 115 | | | 106 | | | 121 | | | 112 |

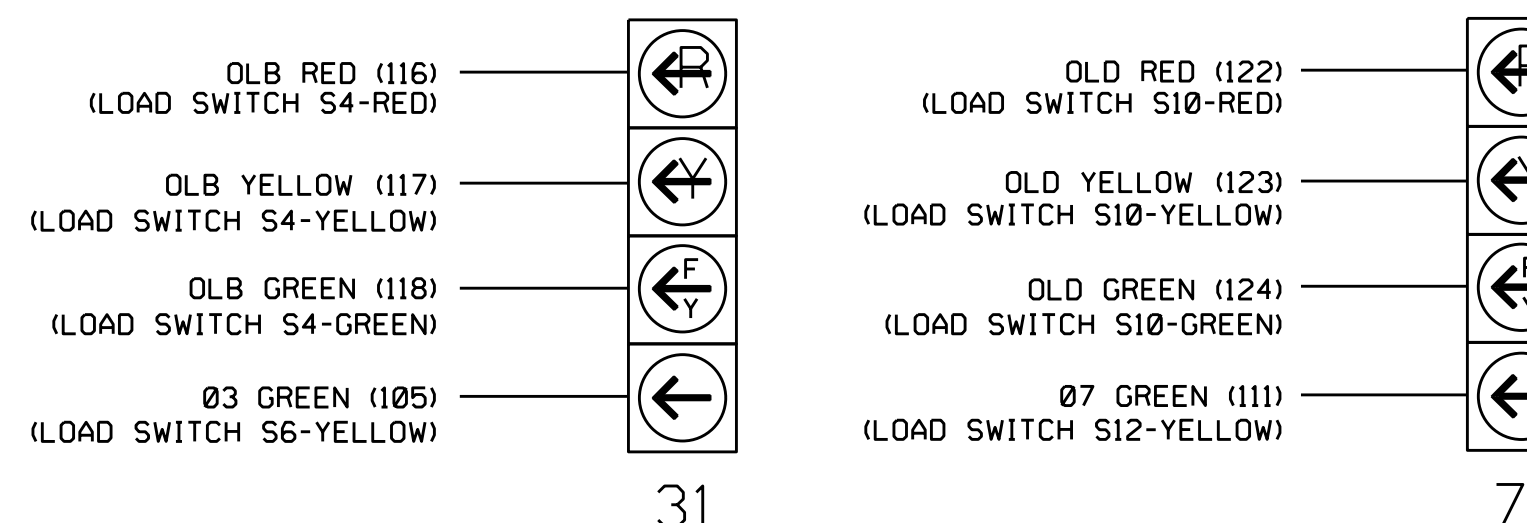
NU = Not Used

* Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)

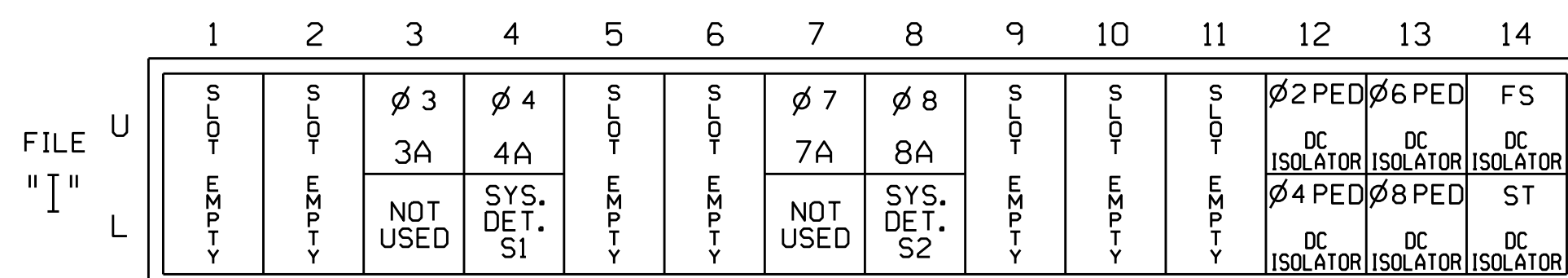


NOTE

The sequence display for signal heads 31 and 71 requires special logic and output remapping. See sheets 2-4 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
 ST = STOP TIME

PED YELLOW CONFLICT MONITOR WIRING DETAIL

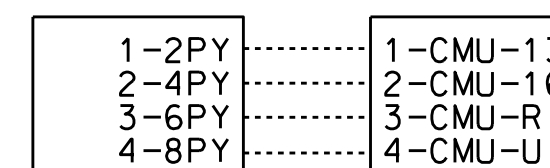
(make cabinet wiring changes as shown below)

In order to use FYA COMPACT mode with the 2018ECLip-NC Monitor, the cabinet must be wired such that the (unused) Ped Yellow load switch outputs are wired to the conflict monitor as follows: From 4 PY (field term. 105) to chan. 9 yellow (monitor pin 16), and from 8 PY (field term. 111) to chan. 10 yellow (monitor pin U).

- Follow the instructions below to make the appropriate connections:
- STEP 1: Fold down rear panel of output file.
 - STEP 2: Find unused wiring harness from conflict monitor card edge connector (which should be tied and bundled together).
 - STEP 3: Find the conductors that correspond to the following conflict monitor card edge pins and solder wire to the appropriate terminal on the rear of the output file as shown below:

CMU-16 _____ 4PY (term. 105)
 CMU-U _____ 8PY (term. 111)

NOTE: Some cabinet manufacturers use keyed connectors to accomplish this wiring configuration. If connectors are used, fold down the rear panel of the output file and find the set of 3 keyed connectors and connect them 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 |
|------------------|---------------|-----------------|---------|----------------------|--------------|------------|------|--------|-----------------|--------------|------------|
| 3A ¹ | TB21-5,6 | 13U | 58 | 20 | 3 | 3 | Y | Y | | | 15 |
| 4A | TB21-7,8 | 14U | 41 | 3 | 4 | 4 | Y | Y | | | 3 |
| 7A ² | TB21-13,14 | 17U | 57 | 19 | 7 | 7 | Y | Y | | | 15 |
| 8A | TB22-1,2 | 18U | 42 | 4 | 8 | 8 | Y | Y | | | 3 |
| *S1 | TB23-7,8 | 14L | 45 | 7 | 14 | SYS | | | | | |
| *S2 | TB24-1,2 | 18L | 46 | 8 | 18 | SYS | | | | | |
| PED PUSH BUTTONS | | | | | | | | | | | |
| P21,P22 | TB22-9,10 | 112U | 67 | 29 | PED 2 | 2 PED | | | | | |
| P41,P42 | TB24-9,10 | 112L | 69 | 31 | PED 4 | 4 PED | | | | | |
| P61,P62 | TB22-11,12 | 113U | 68 | 30 | PED 6 | 6 PED | | | | | |
| P81,P82 | TB24-11,12 | 113L | 70 | 32 | PED 8 | 8 PED | | | | | |

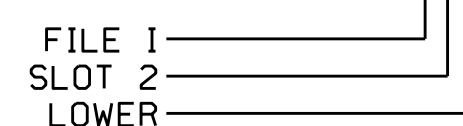
NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

* System detector only. Remove the vehicle phase assigned to this detector in the default programming.

¹Add jumper from 13-F to 13-SP, on rear of input file.

²Add jumper from 17-F to 17-SP, on rear of input file.

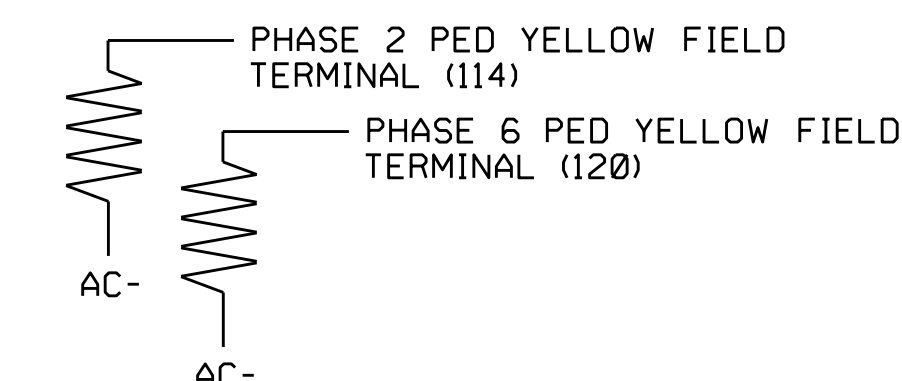
INPUT FILE POSITION LEGEND: I2L



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 - Sheet 1 of 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical and Programming Details for: US 25/SR 3214 (Biltmore Ave.) at US 25 (Southside Ave.)/ Charlotte Street

Division 13 Buncombe County Asheville

PLAN DATE: December 2016 REVIEWED BY: BAS

PREPARED BY: S. Armstrong REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 13-0248 DESIGNED: February 2016 SEALED: 12/16/2016 REVISED: N/A

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030530 JACOBARY M. LITTLE

DocuSigned by: Zachary M. Little 12/20/2016 02:14:03 PM DATE

SIG. INVENTORY NO. 13-0248