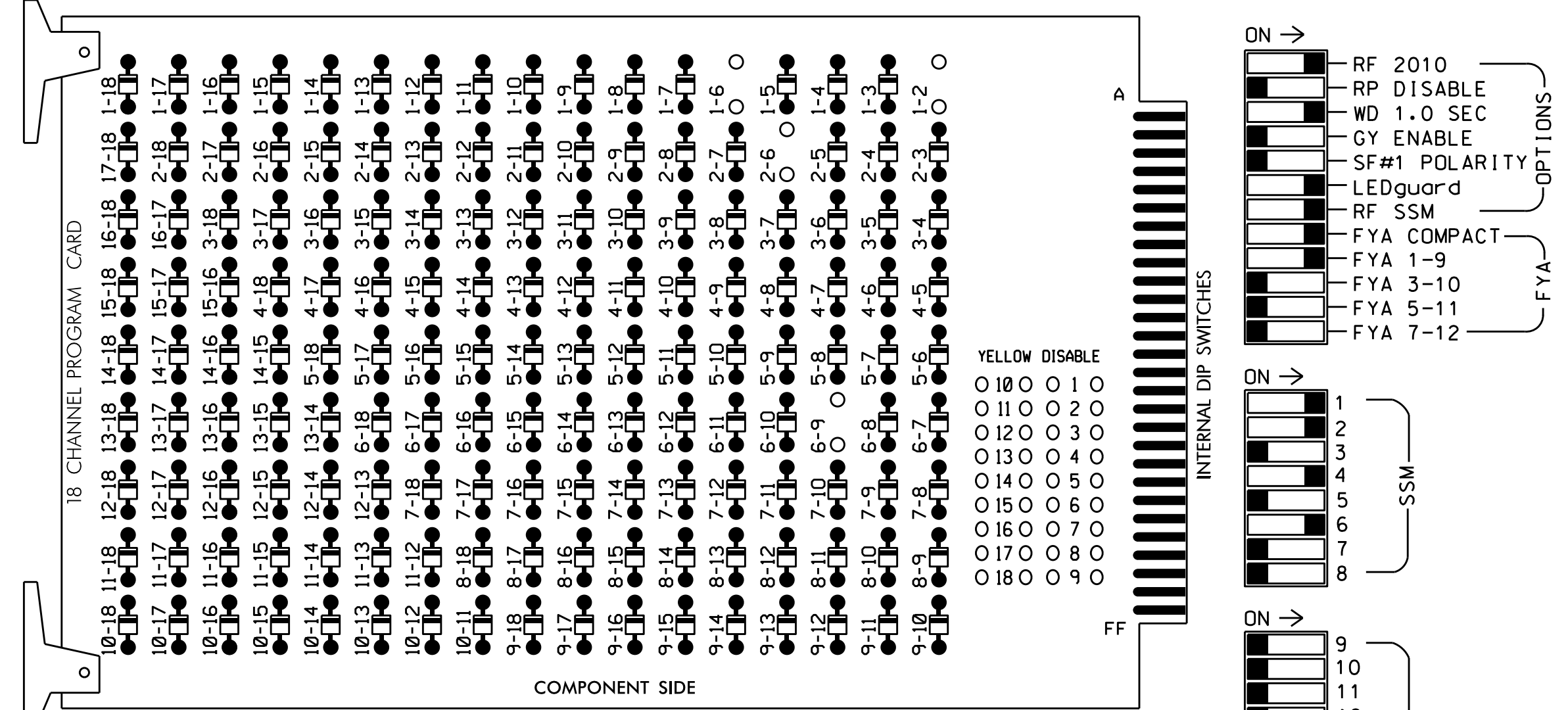


EDI MODEL 2018ECL-NC CONFLICT MONITOR

PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

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



- 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, and overlap 1 as Wag Overlaps.
- The cabinet and controller are part of the NC 119 CLS.

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	14	5	6	15	7	8	16
PHASE	OLA	2	IGRN	2 PED	3	4	4 PED	5	6	6 PED	7	8
SIGNAL HEAD NO.	11*	21,22 23	11*	NU	NU	41,42	NU	NU	61,62	NU	NU	NU
RED	128					101			134			
YELLOW		129				102			135			
GREEN		130				103			136			
RED ARROW	125											
YELLOW ARROW	126											
FLASHING YELLOW ARROW	127											
GREEN ARROW			114									
				*								

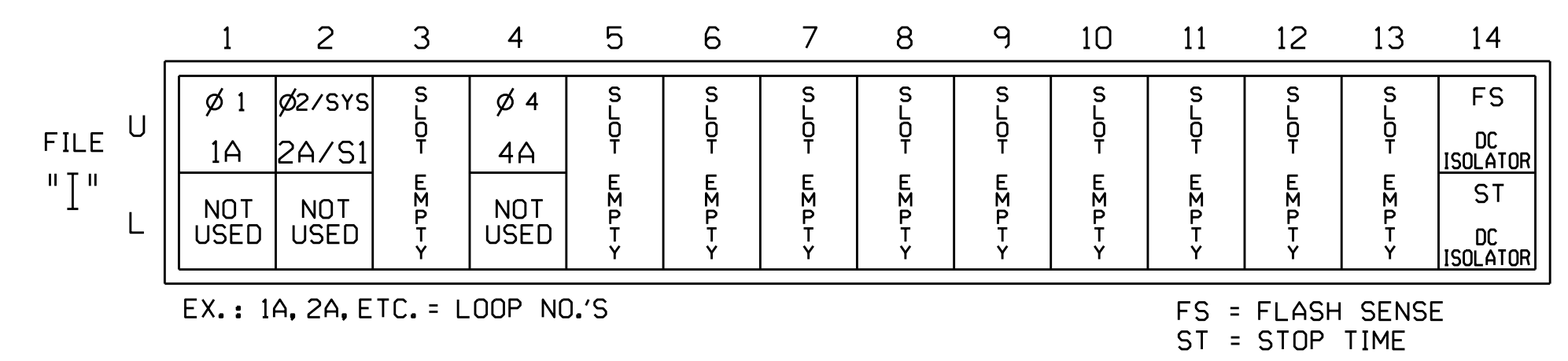
NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 ★ See pictorial of head wiring in detail below.
 NOTE: Load Switches S1 and S3 require output remapping. See sheet 3 of this electrical detail for instructions.

EQUIPMENT INFORMATION

CONTROLLER.....2070
 CABINET.....336
 SOFTWARE.....ECONOLITE OASIS
 CABINET MOUNT.....POLE
 OUTPUT FILE POSITIONS...12
 LOAD SWITCHES USED.....S1,S2,S3,S5,S8
 PHASES USED.....1,2,4,6
 OVERLAP "A".....1+2
 OVERLAP "B".....NOT USED
 OVERLAP "C".....NOT USED
 OVERLAP "D".....NOT USED

INPUT FILE POSITION LAYOUT

(front view)



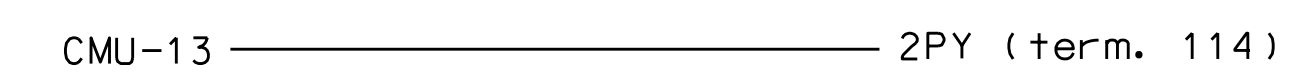
EX.: 1A, 2A, ETC. = LOOP NO.'S
 FS = FLASH SENSE
 ST = STOP TIME

PED YELLOW CONFLICT MONITOR WIRING DETAIL

(make cabinet wiring changes as shown below)

In order to use FYA COMPACT mode on the 2018ECL-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 2 PY (field term. 114) to chan. 9 green (monitor pin 13).

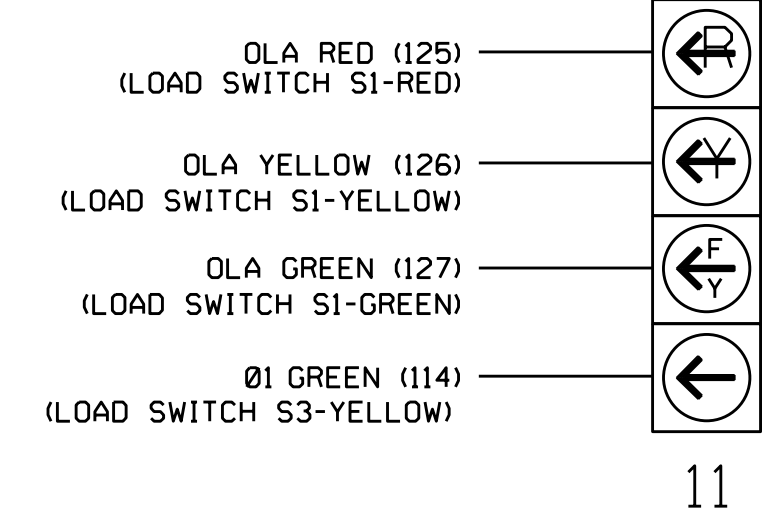
- Follow the instructions below to make the appropriate connections:
- STEP 1: Fold down rear panel of output file.
 - STEP 2: Find unused wiring harness from conflict monitor card edge connector (which should be tied and bundled together).
 - STEP 3: Find the conductors that correspond to the following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



NOTE: Some cabinet manufacturers use a keyed plug to accomplish this wiring configuration. If connectors are used, simply plug the two connectors together that are labeled with the pin-out as shown above.

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)

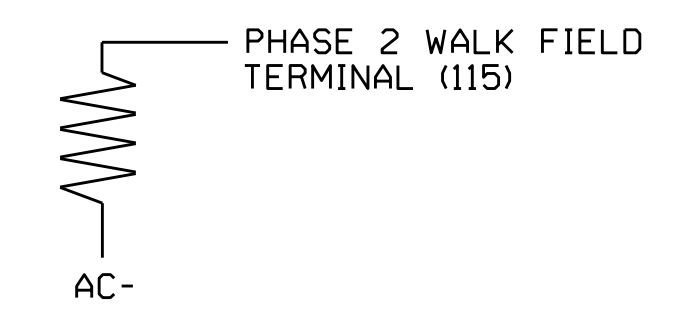


NOTE: The sequence display for this signal requires special logic and output remapping. See sheet 2 for programming instructions.

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

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



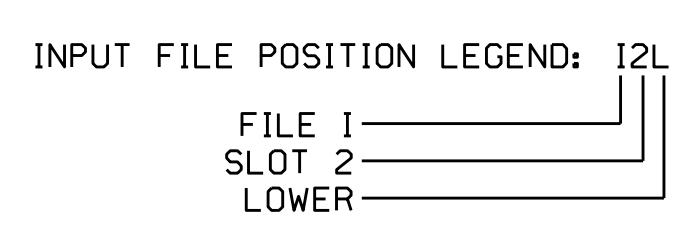
SPECIAL DETECTOR NOTE

Install a Multizone Microwave detection system for loop 6A for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

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 ¹	TB21-1,2	11U	56	18	1	1	Y	Y			15
	-	-	59	21	15	6	Y	Y	Y		3
2A/S1	TB21-3,4	12U	39	1	2	2/SYS	Y	Y			
4A	TB21-7,8	14U	41	3	4	4	Y	Y			

¹Add jumper from I1-F to I1-SP on rear of input file.



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 07-0440T1
 DESIGNED: September 2016
 SEALED: 1/25/17
 REVISED: N/A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical Detail - Temp 1 (TMP Phase I) - Sheet 1 of 3

Prepared In the Offices of:
 Transportation Mobility and Safety Solutions
 Signal Management System

NC 119 at I-40 EB/I-85 NB Ramps

Division 7 Alamance County Mebane

PLAN DATE: January 2017 REVIEWED BY: BAS

PREPARED BY: B. SIMMONS REVIEWED BY:

REVISIONS INIT. DATE

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SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030530 JACUARY M. LITTLE

DocuSigned by: *Jason M. Little* 1/30/2017 0218FD94F341F DATE

SIG. INVENTORY NO. 07-0440T1