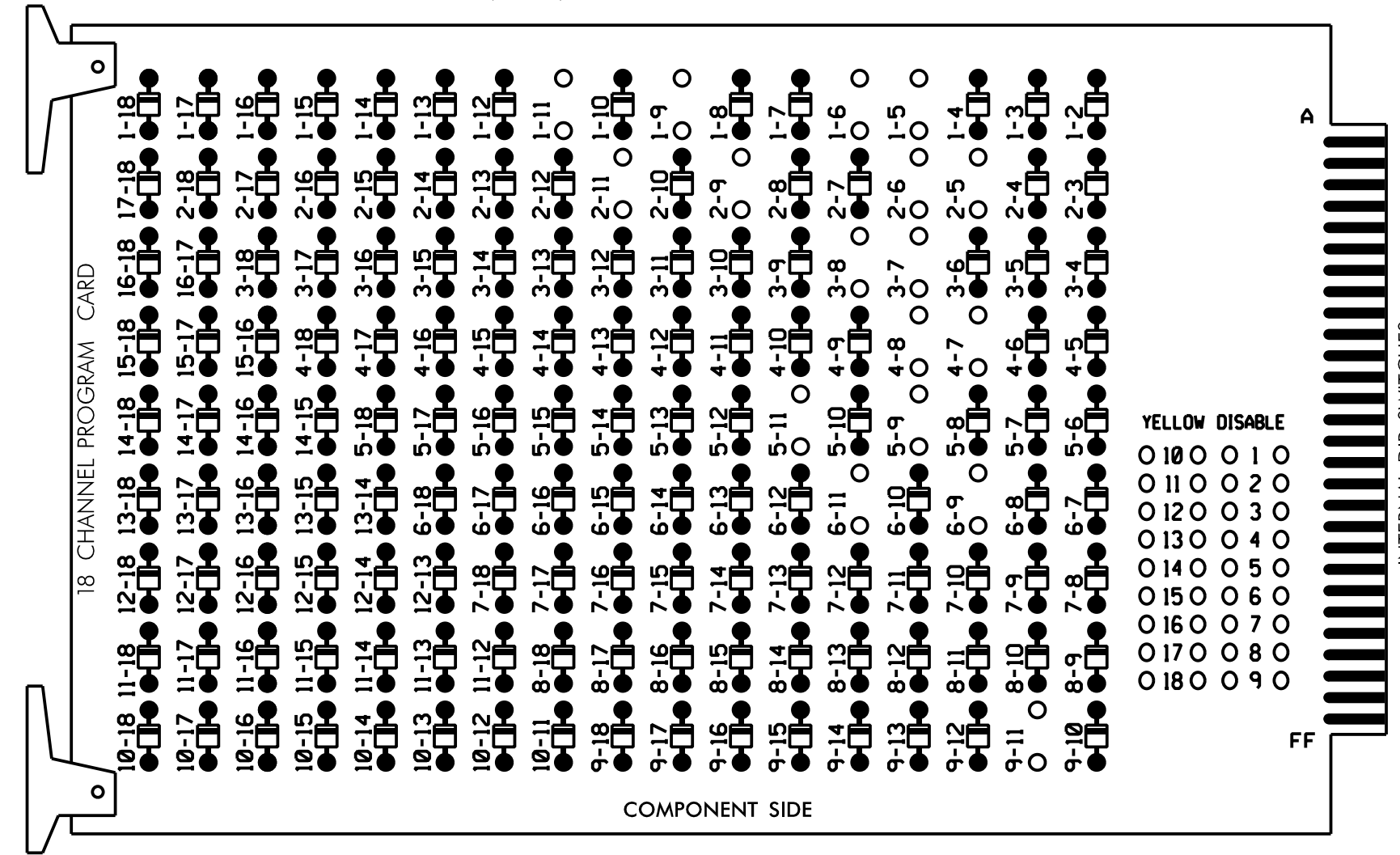


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

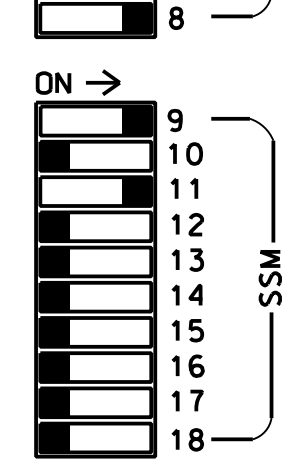
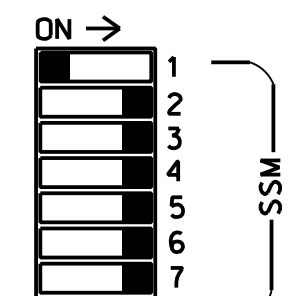
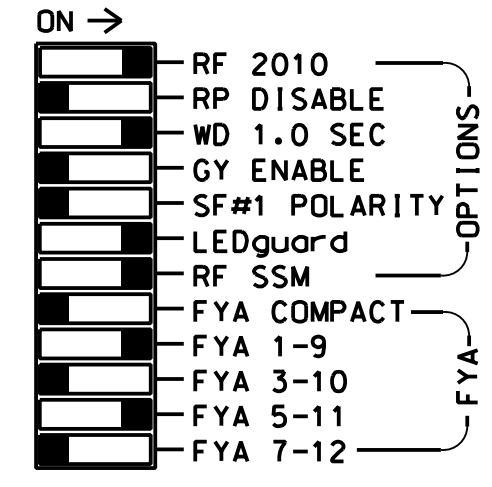
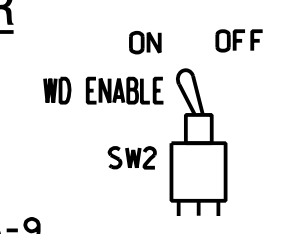
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 3-7, 3-8, 4-7, 4-8, 5-9, 5-11, 6-9, 6-11 and 9-11.



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.
6. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
7. The cabinet and controller are part of the NC 133 Closed Loop System.

### EQUIPMENT INFORMATION

CONTROLLER.....2070E  
 CABINET.....332 W/AUX  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE  
 LOAD SWITCHES USED.....S1,S2,S4,S5,S7,S8,S10,S11,  
 AUX S1,AUX S4  
 PHASES USED.....1,2,3,4,5,6,7,8  
 OVERLAP "A".....1+2  
 OVERLAP "B".....NOT USED  
 OVERLAP "C".....5+6  
 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	22	31,32	41,42	NU	42	51	61,62	NU	71	81,82	NU	11	NU	NU	51	NU
RED		128				101		*		134			107						
YELLOW	*	129				102				135			108						
GREEN		130				103				136			109						
RED ARROW					116								122			A121		A114	
YELLOW ARROW					117	117							123			A122		A115	
FLASHING YELLOW ARROW																A123		A116	
GREEN ARROW	127				118	118				133	133		124						

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 "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅ 1	∅ 2/SYS	S	S	S	∅ 3	∅ 3	∅ 4	S	S	S	S	S	FS
L	1A	2A/S17	2B/S18	2B/S18	2B/S18	3A	3B	4A	2B/S18	2B/S18	2B/S18	2B/S18	2B/S18	DC ISOLATOR
U	∅ 5	∅ 6/SYS	∅ 5	S	S	∅ 7	∅ 8	S	S	S	S	S	S	FS
L	5A	6A/S19	5B	6B/S20	6B/S20	7A	8A	8B	6B/S20	6B/S20	6B/S20	6B/S20	6B/S20	DC ISOLATOR

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

FS = FLASH SENSE  
 ST = STOP TIME

⊗ Wired Input - Do not populate slot with detector card

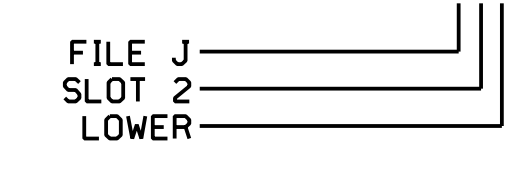
### INPUT FILE CONNECTION & PROGRAMMING CHART

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
	-	I1U	56	18*	51	1	Y	Y			3
2A/S17	TB2-5,6	I2U	39	1	2	2/SYS	Y	Y			
2B/S18	TB2-7,8	I2L	43	5	12	2/SYS	Y	Y			
3A	TB4-9,10	I6U	41	3	4	3	Y	Y			3
3B	TB6-1,2	I7U	65	27	34	3	Y	Y			
4A	TB6-5,6	I8U	49	11	24	4	Y	Y			
5A <sup>2</sup>	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9*	22	2	Y	Y	Y		3
	-	J1U	55	17*	55	5	Y	Y			3
5B	TB3-9,10	J3U	64	26	36	5	Y	Y			15
6A/S19	TB3-5,6	J2U	40	2	6	6/SYS	Y	Y			
6B/S20	TB3-7,8	J2L	44	6	16	6/SYS	Y	Y			
7A	TB5-9,10	J6U	42	4	8	7	Y	Y			3
8A	TB7-1,2	J7U	66	28	38	8	Y	Y			5
8B	TB7-3,4	J7L	79	41	48	8	Y	Y			15

- <sup>1</sup>Add jumper from I1-W to J4-W, on rear of input file.
- <sup>2</sup>Add jumper from J1-W to I4-W, on rear of input file.

\* See vehicle detector setup programming detail for alternate phasing on sheets 3 and 4.

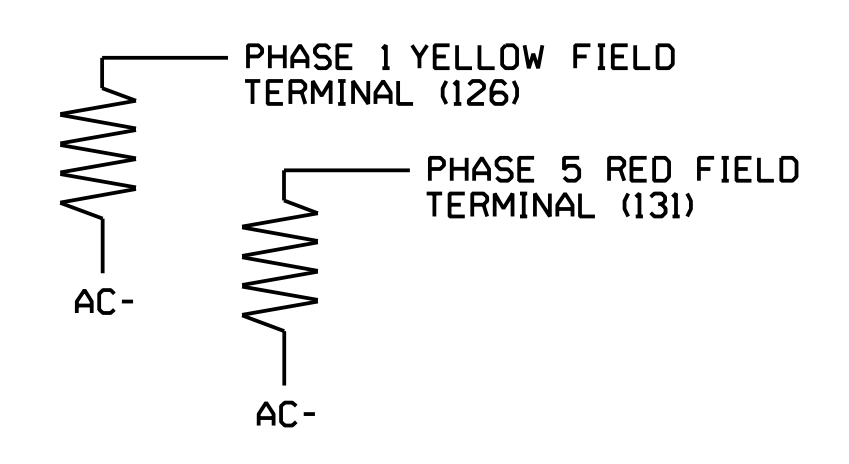
INPUT FILE POSITION LEGEND: J2L



### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

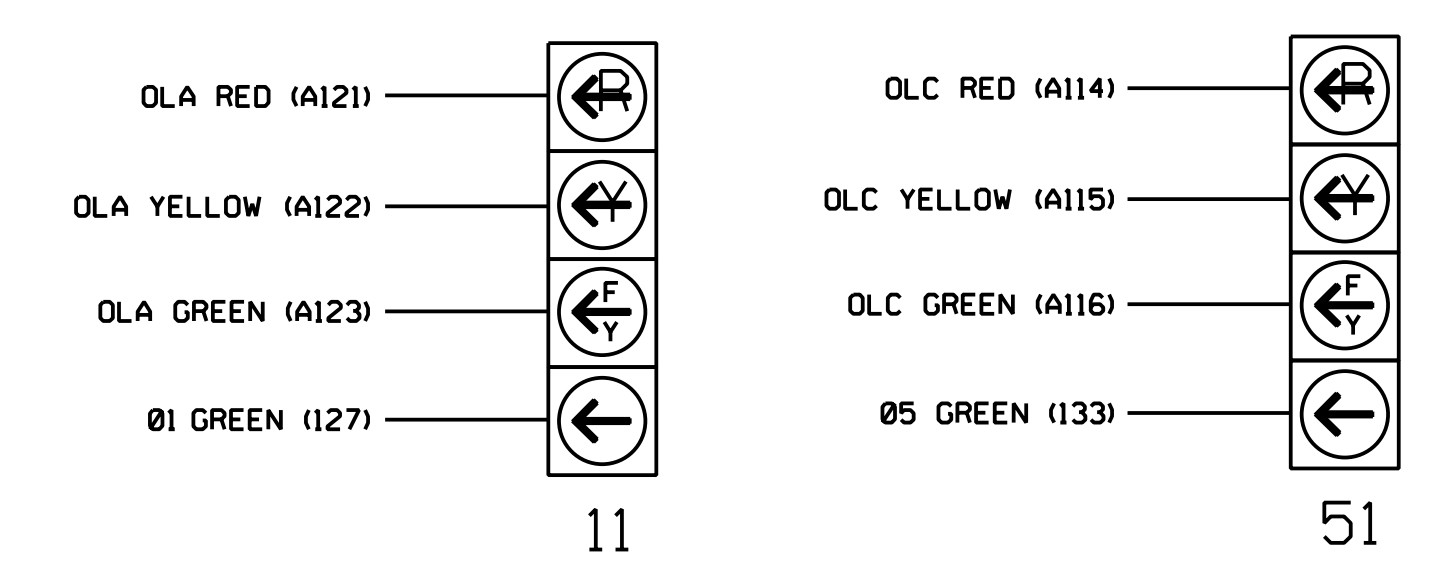
ACCEPTABLE VALUES	
VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



**! IMPORTANT:** REMOVE RESISTOR FROM PHASE 2 RED FIELD TERMINAL, IF PRESENT.

### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



**NOTE**

The sequence display for signal heads 11 and 51 requires special logic programming. See sheet 2 for programming instructions.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-1035  
 DESIGNED: June 2017  
 SEALED: 9/10/2021  
 REVISED: N/A

Electrical Detail - Sheet 1 of 5  
 Signal Upgrade  
 Final Design

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

Prepared for:  
  
 750 N. Greenfield Pkwy, Corner, NC 27529

NC 133 (Long Beach Road) at SR 1969 (Old Long Beach Road) / Long Beach Crossing Entrance	
Division 03 Brunswick Co. Southport	
PLAN DATE: June 2017	REVIEWED BY: A.D. Klinksiek
PREPARED BY: A.H. Thornburg	REVIEWED BY: N.R. Simmons
REVISIONS	INIT. DATE

SEAL  
  
 Prepared by: *Natasha Simmons*  
 DATE: 9/10/2021  
 SIGNATURE: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 SIG. INVENTORY NO. 03-1035

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