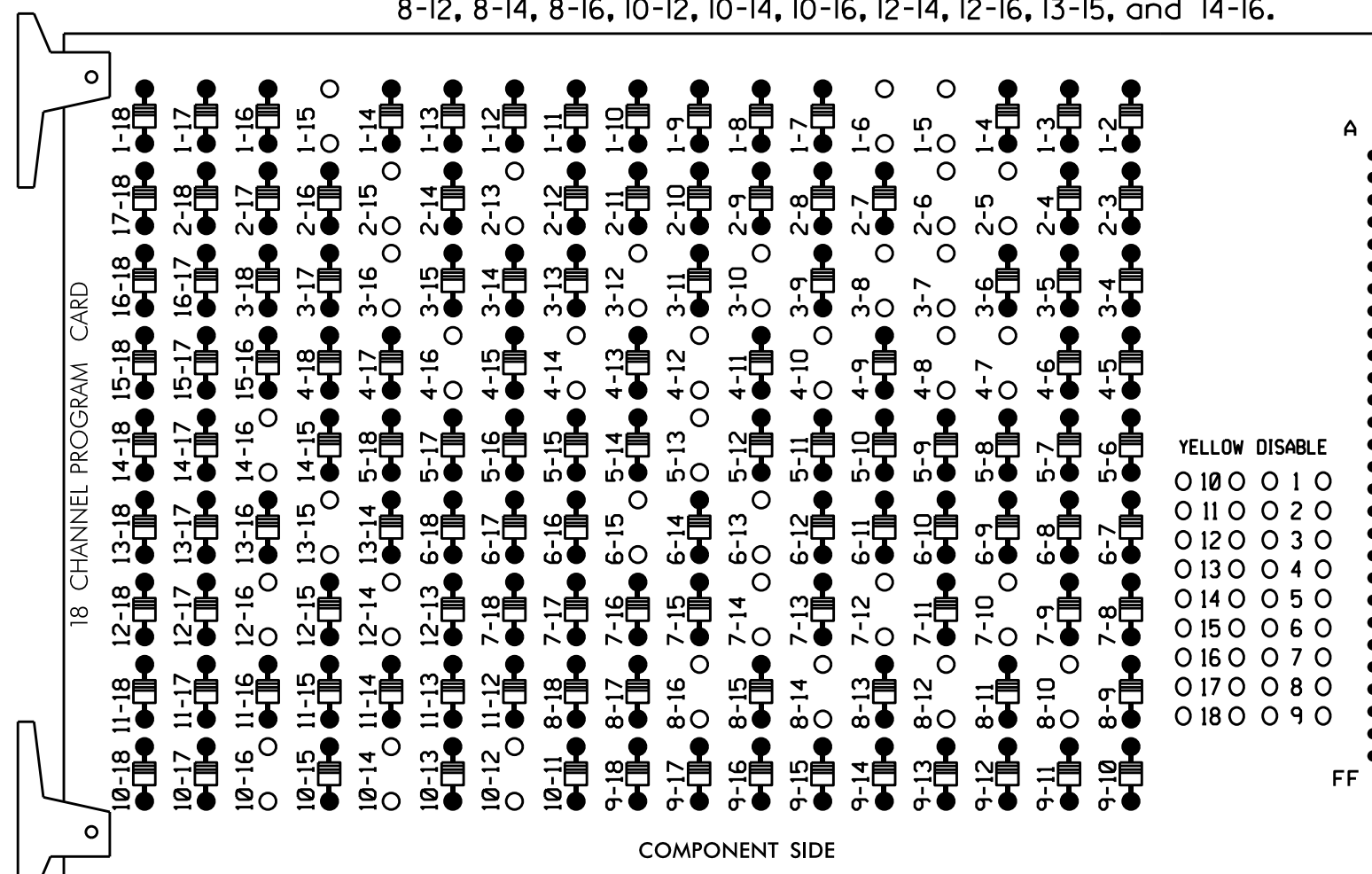


EDI MODEL 2018ECL-NC CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

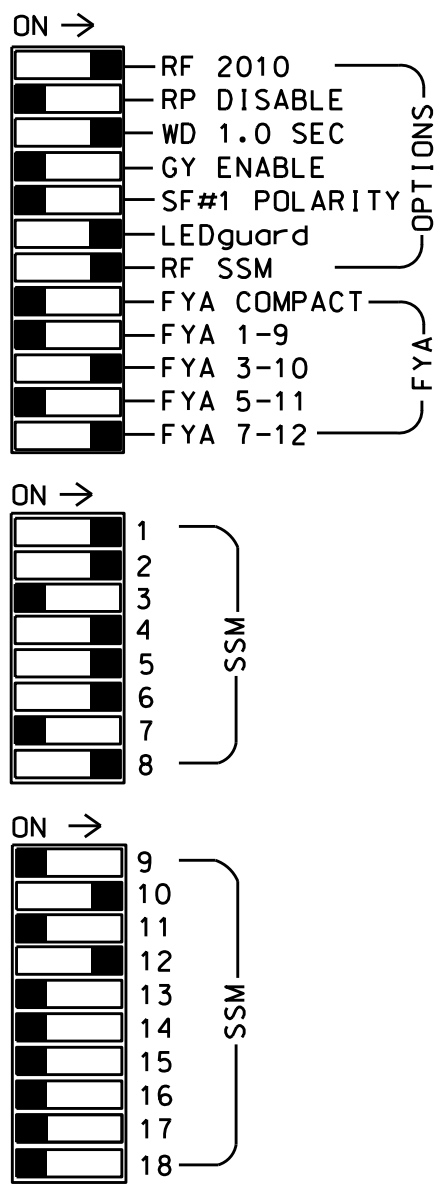
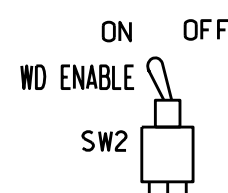
REMOVE DIODE JUMPERS 1-5, 1-6, 1-15, 2-5, 2-6, 2-13, 2-15, 3-7, 3-8, 3-10, 3-12, 3-16, 4-7, 4-8, 4-10, 4-12, 4-14, 4-16, 5-13, 6-13, 6-15, 7-10, 7-12, 7-14, 8-10, 8-12, 8-14, 8-16, 10-12, 10-14, 10-16, 12-14, 12-16, 13-15, and 14-16.



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



■ = 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 Kannapolis City System.

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,S3,S4,S5,S6,S7,S8,S9,S10,
S11,S12,AUX S2,AUX S5
PHASES USED.....1,2,3,4,5,6,7,8
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	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	P21, P22	31	41,42	P41, P42	42	51,52	61,62	P61, P62	71	81,82	P81, P82	NU	31	NU	71	NU
RED		128			101			134			107								
YELLOW		129		*	102			135		*	108								
GREEN		130			103			136			109								
RED ARROW	125							131						A124				A101	
YELLOW ARROW	126	126						132	132					A125				A102	
FLASHING YELLOW ARROW														A126				A103	
GREEN ARROW	127	127			118			133	133		124								
Hand					113			104			119		110						
Person					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 below.

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	∅3	∅4	∅5	∅6	∅7	∅8	∅9	∅10	∅11	∅12	∅13	∅14
L	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A
U	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8	∅9	∅10	∅11	∅12	∅13	∅14
L	1B	2B	3B	4B	5B	6B	7B	8B	9B	10B	11B	12B	13B	14B

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

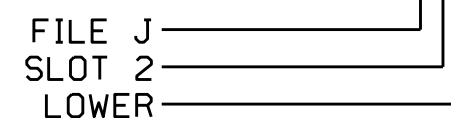
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB2-5,6	I2U	39	1	2	1	Y	Y			3
1B	TB2-7,8	I2L	43	5	12	1	Y	Y			15
2A	TB2-9,10	I3U	63	25	32	2	Y	Y			
2B	TB2-11,12	I3L	76	38	42	2	Y	Y			
3A ¹	TB4-5,6	I5U	58	20	3	3	Y	Y			15
	-	J8U	50	12	28	8	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			
5B	TB3-5,6	J2U	40	2	6	5	Y	Y			
5C	TB3-7,8	J2L	44	6	16	5	Y	Y			15
6A	TB3-9,10	J3U	64	26	36	6	Y	Y			
6B	TB3-11,12	J3L	77	39	46	6	Y	Y			
7A ²	TB5-5,6	J5U	57	19	7	7	Y	Y			15
	-	I8U	49	11	24	4	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2	PED				
P41,P42	TB8-5,6	I12L	69	31	PED 4	4	PED				
P61,P62	TB8-7,9	I13U	68	30	PED 6	6	PED				
P81,P82	TB8-8,9	I13L	70	32	PED 8	8	PED				

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

- Add jumper from I5-W to J8-W, on rear of input file.
- Add jumper from J5-W to I8-W, on rear of input file.

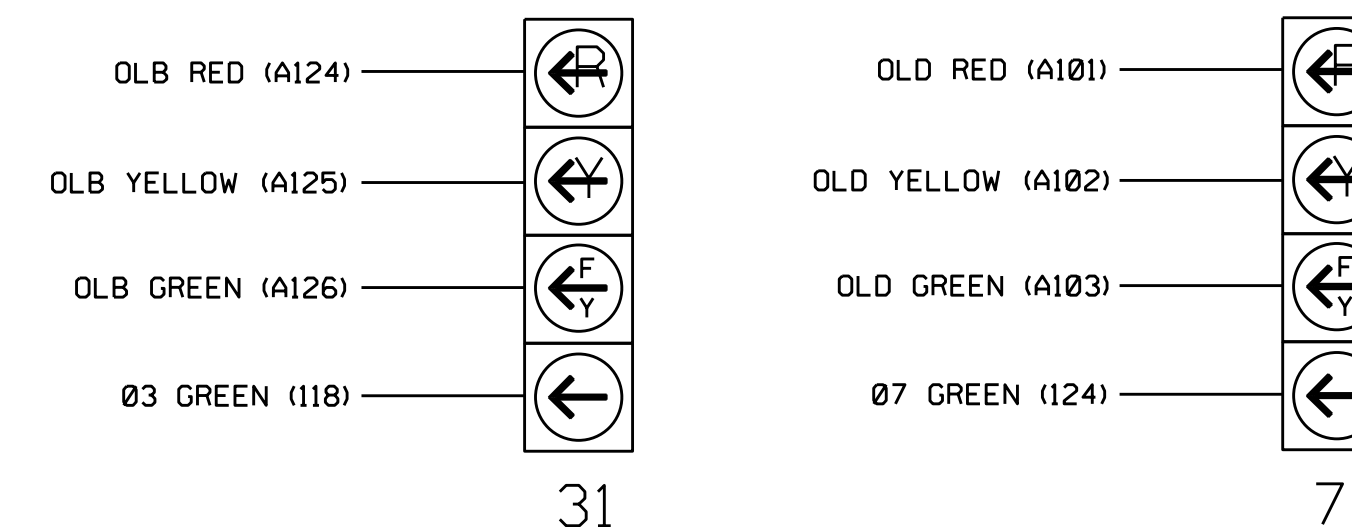
IMPORTANT! Remove the following jumpers, if present:
From I1-W to J4-W, on rear of input file.
From J1-W to I4-W, on rear of input file.

INPUT FILE POSITION LEGEND: J2L



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

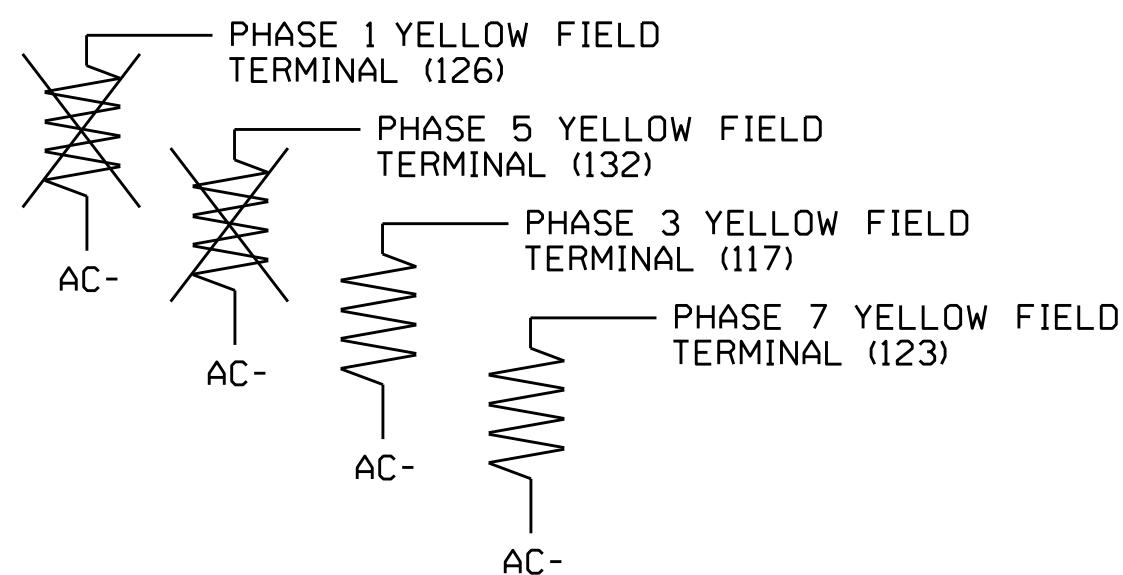
The sequence display for signal heads 31 and 71 require special logic programming. See sheet 2 for programming instructions.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 10-0445
DESIGNED: April 2016
SEALED: 6/22/2016
REVISED: N/A

LOAD RESISTOR INSTALLATION DETAIL

(install and remove resistors as shown below)

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



Electrical Detail - Final Design - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:
TRANSPORTATION MOBILITY AND SAFETY CONSULTANTS
Signal Management Services

750 N. Greenfield Pkwy, Garner, NC 27529

NC 3 (Mooresville Road) at SR 1691 (Dale Earnhardt Blvd.)

Division 10 Cabarrus County Kannapolis
PLAN DATE: June 2016 REVIEWED BY: BAS
PREPARED BY: S. Armstrong REVIEWED BY:
REVISIONS INIT. DATE
DocuSigned by: Keith M. Mims 6/28/2016
SIG. INVENTORY NO. 10-0445