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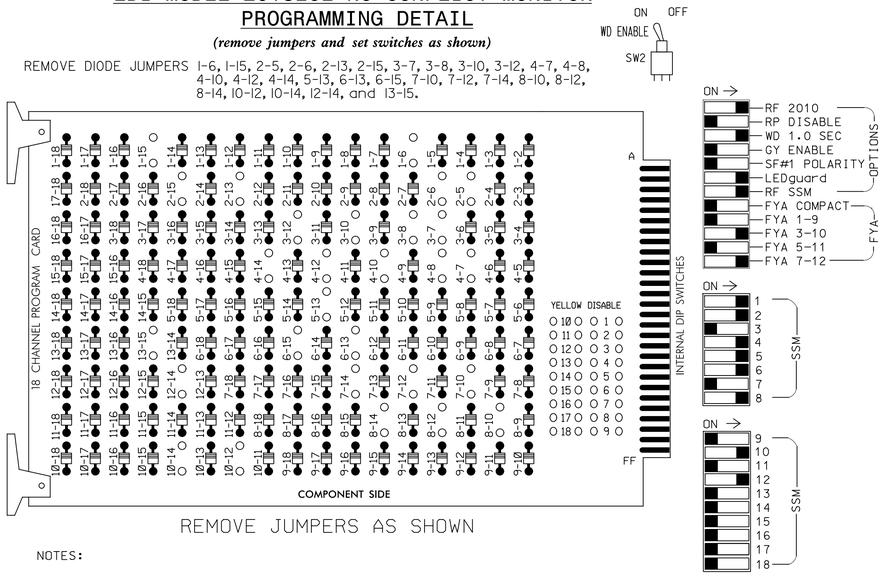
PROJECT REFERENCE NO.	SHEET NO.
R-5735	SIG-1.1

EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

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



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.

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. Program phases 4 and 8 for Dual Entry.
3. Enable Simultaneous Gap-Out for all Phases.
4. Program phases 2 and 6 for Startup In Green.
5. Program phases 2, 4 and 6 for Startup Ped Call.
6. Program phases 2 and 6 for Yellow Flash, and overlaps 1 and 2 as Wag Overlaps.

EQUIPMENT INFORMATION

CONTROLLER.....2070L
CABINET .....332 W/ AUX FILE
SOFTWARE .....ECONOLITE OASIS
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS..18 (12-STD, 6-AUX)
LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8,S9, S10,S11,AUX S2,AUX S5
PHASES USED.....1,2,3,4,5,6,7,8,2PED,4PED,6PED
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	21,22	P21, P22	31★	41,42	P41, P42	51	61,62	P61, P62	71★	81,82	NU	NU	31★	NU	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						132							A125			A102	
FLASHING YELLOW ARROW														A126			A103	
GREEN ARROW	127			118			133			124								
✋			113			104			119									
🚶			115			106			121									

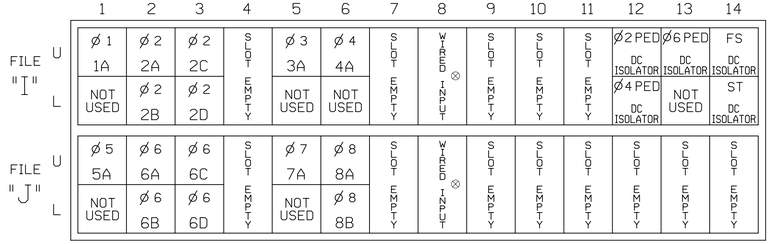
NU = Not Used

✳ 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)



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	TB2-1,2	I1U	56	18	1	1	Y	Y	-	-	-
2A	TB2-5,6	I2U	39	1	2	2	Y	Y	-	2.3	-
2B	TB2-7,8	I2L	43	5	12	2	Y	Y	-	2.3	-
2C	TB2-9,10	I3U	63	25	32	2	Y	Y	-	-	-
2D	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	-	-	3
4A	TB4-9,10	I6U	41	3	4	4	Y	Y	-	-	-
5A	TB3-1,2	J1U	55	17	5	5	Y	Y	-	-	-
6A	TB3-5,6	J2U	40	2	6	6	Y	Y	-	1.9	-
6B	TB3-7,8	J2L	44	6	16	6	Y	Y	-	1.9	-
6C	TB3-9,10	J3U	64	26	36	6	Y	Y	-	-	-
6D	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	-	-	3
8A	TB5-9,10	J6U	42	4	8	8	Y	Y	-	-	-
8B	TB5-11,12	J6L	46	8	18	8	Y	Y	-	-	15
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					

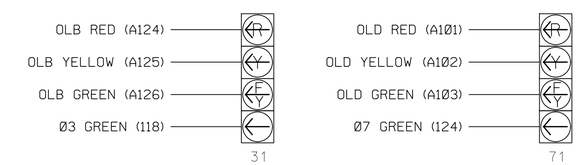
NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

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

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

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

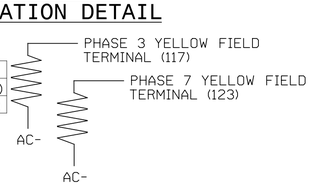
COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

LOAD RESISTOR INSTALLATION DETAIL

ACCEPTABLE VALUES

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



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 14-0021
DESIGNED: December 2018
SEALED: 2/28/2019
REVISED: N/A

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ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared In the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 19/64/74/129
at
US 19 Bus/SR 1556 (Hiwassee St)

Division 14 | Cherokee County | Near Murphy

PLAN DATE: December 2018 | REVIEWED BY: Z Harris
PREPARED BY: K M Cory | REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 038970 ENGINEER KELLY M. CORY

DocuSigned by: Kelly M Cory 2/28/2019
SIGNATURE DATE

SIG. INVENTORY NO. 14-0021

Electrical Details - Sheet 1 of 2 - Signal Modification

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