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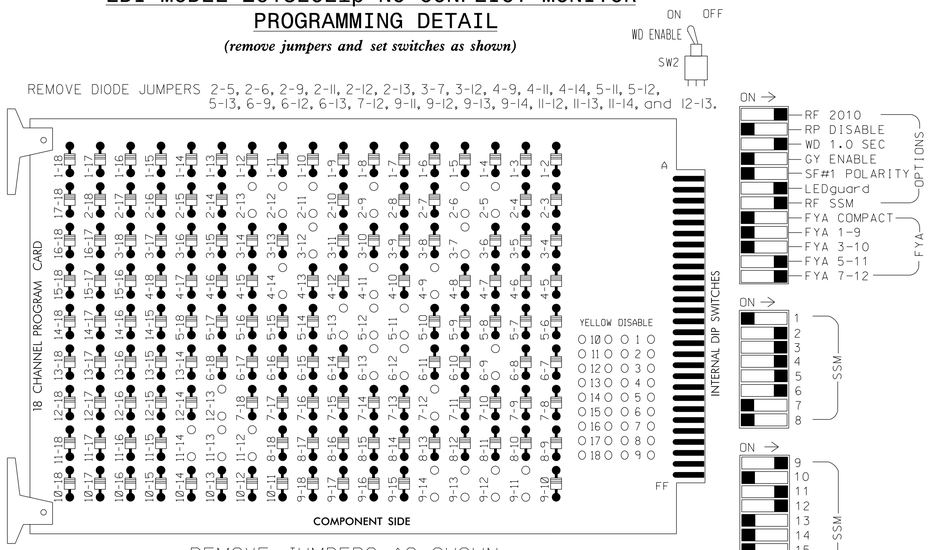
PROJECT REFERENCE NO.	SHEET NO.
U-4751	Sig. 5.7

EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



■ = DENOTES POSITION OF SWITCH

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. Integrate monitor with Ethernet network in cabinet.

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	OLG	8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	NU	21,22, 23	P21, P22	31	32	33	41	42	43	P41, P42	44★	51,52	61,62, 63	NU	24★	NU	NU	64,65	NU	NU	44★	24★	NU
RED		128			116	116		101	101				134					A121			A114	A101	
YELLOW		129			117	117		102	102				135		✳								
GREEN		130			118	118		103	103				136										
RED ARROW				116			101					131											
YELLOW ARROW				117			102					132						A122			A115	A102	
FLASHING YELLOW ARROW																					A116	A103	
GREEN ARROW				118	118		103	103			133	133			124			A123					
✋			113							104													
🚶			115							106													

NU = Not Used

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

★ See pictorial of head wiring in detail below.

NOTE: Load Switch S10 require output remapping. See sheet 3 of this electrical detail for instructions.

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.....S2,S3,S4,S5,S6,S7,S8,S10, AUX S1,AUX S4,AUX S5.
PHASES USED.....2,2PED,3,4,4PED,5,6.
OVERLAP "A".....4+6
OVERLAP "B".....NOT USED
OVERLAP "C".....4+5
OVERLAP "D".....2+3
OVERLAP "G".....3

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 Start Up In Green.
5. Program phases 2 and 4 for 'STARTUP PED CALL'.
6. Program phases 2 and 6 for Yellow Flash and overlap 1 as wag overlaps.
7. The cabinet and controller are part of the Wilmington Signal System.

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U	SLOT EMPTY	Ø2 2A	Ø2 2C	SLOT EMPTY	Ø3 3B	Ø3 3C	Ø4 4A	Ø4 4C	SYS. DET. S1	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	SLOT EMPTY	FS DC ISOLATOR
	L		Ø2 2B	Ø3 3A		NOT USED	Ø3 3D	Ø4 4B	NOT USED	SYS. DET. S2			Ø4 PED DC ISOLATOR		ST DC ISOLATOR
FILE "J"	U	Ø5 5A	Ø5 5B	SLOT EMPTY	Ø6 6A	SLOT EMPTY	Ø6 6B	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L	NOT USED	Ø5 5C		NOT USED		Ø6 6C								

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

FS = FLASH SENSE
ST = STOP TIME

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
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
2C	TB2-9,10	I3U	63	25	32	2	Y	Y			
3A	TB2-11,12	I3L	76	38	42	3	Y	Y			
3B	TB4-5,6	I5U	58	20	3	3	Y	Y			
3C	TB4-9,10	I6U	41	3	4	3	Y	Y			10
3D	TB4-11,12	I6L	45	7	14	3	Y	Y			20
4A	TB6-1,2	I7U	65	27	34	4	Y	Y			
4B	TB6-3,4	I7L	78	40	44	4	Y	Y			
4C	TB6-5,6	I8U	49	11	24	4	Y	Y			
✳ S1	TB6-9,10	I9U	60	22	11	SYS					
✳ S2	TB6-11,12	I9L	62	24	13	SYS					
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	TB5-1,2	J4U	48	10	26	6	Y	Y			
6B	TB5-9,10	J6U	42	4	8	6	Y	Y			
6C	TB5-11,12	J6L	46	8	18	6	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					

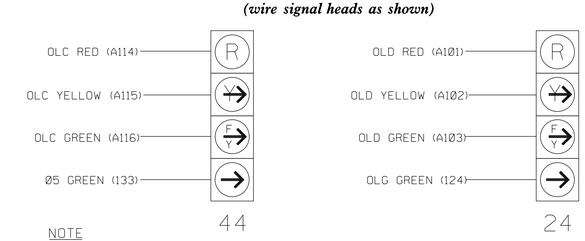
NOTE:

INSTALL DC ISOLATORS IN INPUT FILE SLOT I12.

✳ SYSTEM DETECTOR ONLY. REMOVE THE VEHICLE PHASE ASSIGNED TO THIS DETECTOR IN THE DEFAULT PROGRAMMING.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



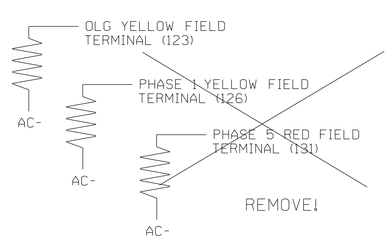
NOTE

1. The sequence display for signal heads 24 and 44 requires special logic programming. See sheet 2 of 3 for programming instructions.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)



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: 03-0390
DESIGNED: April 2017
SEALED:
REVISED:

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Signal Upgrade - Final Design (Electrical Detail Sheet 1 of 3)

ELECTRICAL AND PROGRAMMING DETAILS FOR:

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

US 17 Business (Market Street) at SR 2048 (Gordon Road)

Division 03 New Hanover County Wilmington

PLAN DATE: April 2017	REVIEWED BY:	MB Toth	
PREPARED BY: AM Encarnacion	REVIEWED BY:		

REVISIONS	INIT.	DATE

Docusigned by: Melissa B. Toth — DOCUSIGNED SIGNATURE — 6/6/2017 DATE

SIG. INVENTORY NO. 03-0390

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

06-JUN-2017 13:48
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