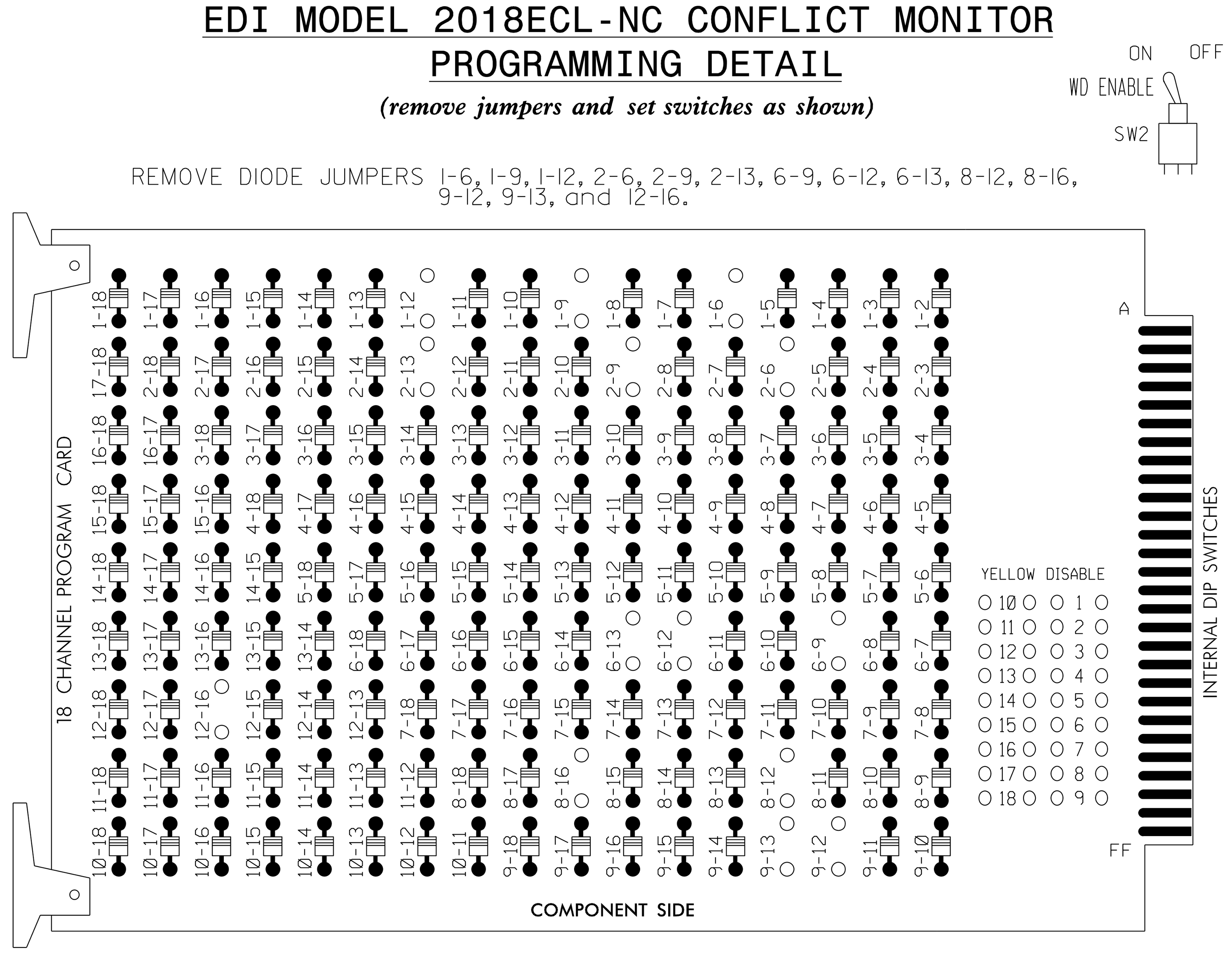
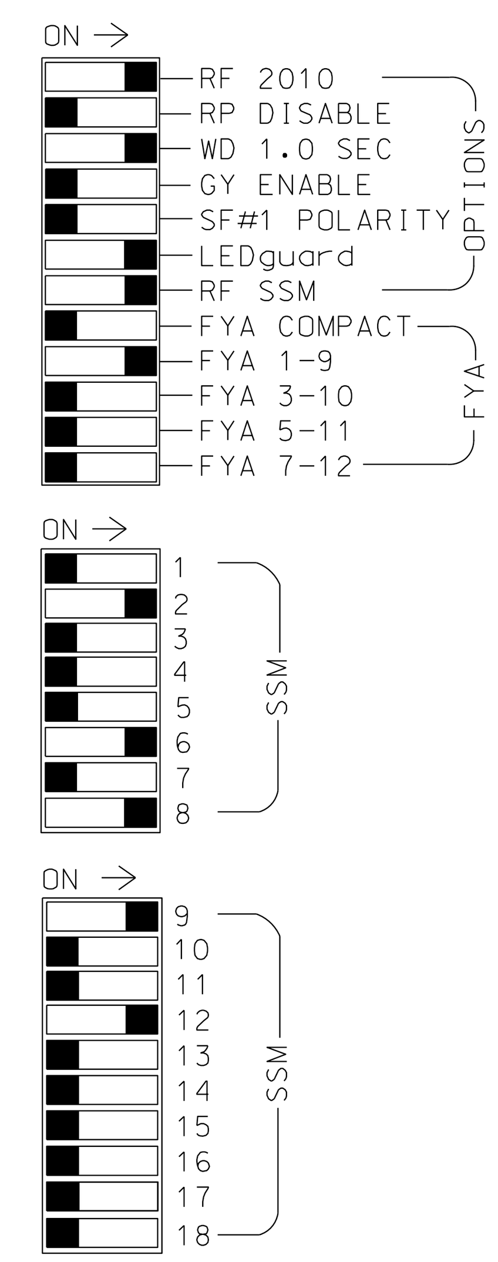
PROJECT REFERENCE NO.	SHEET NO.
U-3338B	Sig. 23.1

EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-6, 1-9, 1-12, 2-6, 2-9, 2-13, 6-9, 6-12, 6-13, 8-12, 8-16, 9-12, 9-13, and 12-16.





■ = DENOTES POSITION OF SWITCH

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. 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 8 for 'STARTUP PED CALL'.
6. Program phases 2 and 6 for Yellow Flash, and overlap 1 and 4 as Wag Overlaps.
7. The cabinet and controller are part of the Wilmington Signal System.

EQUIPMENT INFORMATION

CONTROLLER.............2070E
CABINET................332 W/ AUX
SOFTWARE...............ECONOLITE OASIS
CABINET MOUNT..........BASE
OUTPUT FILE POSITIONS...18 (12-STD, 6-AUX)
LOAD SWITCHES USED......S1,S2,S3,S8,S11,S12,AUX S1,AUX S5
PHASES USED............1,2,2PED,6,8,8PED.
OVERLAP "A"............1+2
OVERLAP "B"............NOT USED
OVERLAP "C"............NOT USED
OVERLAP "D"............1+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, 23	P21, P22	NU	NU	NU	NU	61,62	NU	NU	81,82	P81, P82	11 ★	NU	NU	NU	83 ★	NU
RED		128						134									A101	
YELLOW	✱	129						135										
GREEN		130						136										
RED ARROW											107		A121					
YELLOW ARROW											108		A122				A102	
FLASHING YELLOW ARROW													A123				A103	
GREEN ARROW	127										109							
(hand)			113									110						
(walk)			115									112						

NU = Not Used

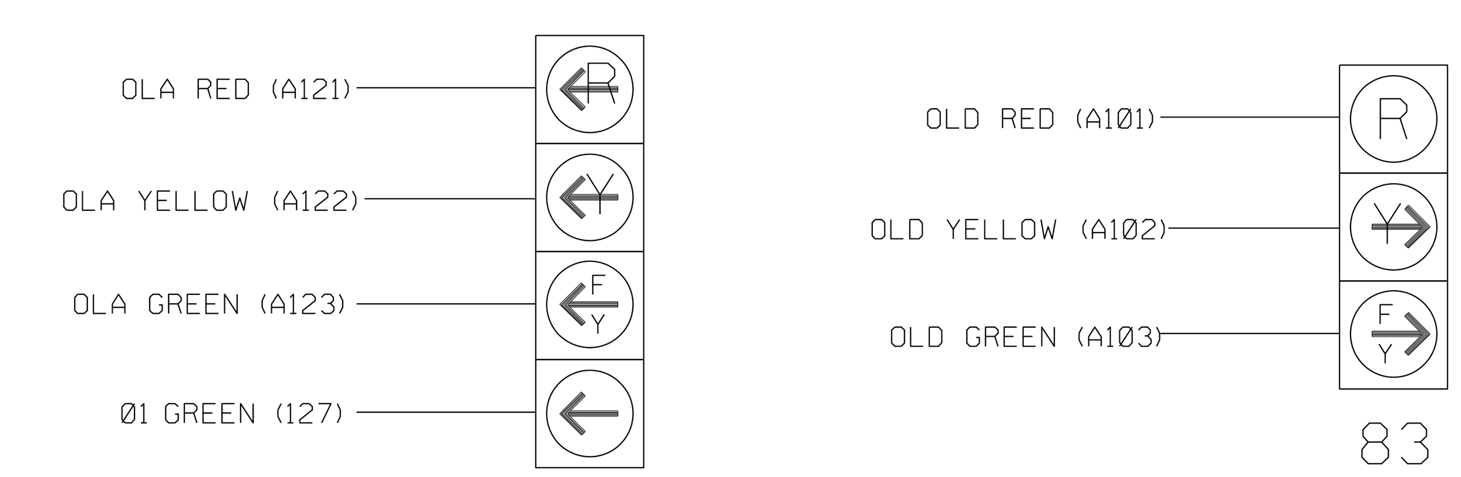
✱ Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail below.

✱✱ Flash Note: Wire Overlap "D" to flash on Flasher unit #2, Circuit #1.

3 & 4 SECTION FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

1. The sequence display for signal head 11 requires special logic programming. See sheet 2 of 2 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT EMPTY	Ø 1 1A	Ø 2 2A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SYS. DET. S1	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	NOT USED	FS DC ISOLATOR
	L		Ø 1 1B	Ø 2 2B						SYS. DET. S2			NOT USED	Ø8 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	SLOT EMPTY	Ø 6 6A	SLOT EMPTY	WIRED INPUT ⊗	SLOT EMPTY	Ø 8 8A	SLOT EMPTY	SLOT EMPTY	SYS. DET. S3	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L		Ø 6 6B				Ø 8 8B			SYS. DET. S4					

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

⊗ Wired Input - Do not populate slot with detector card

FS = FLASH SENSE
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

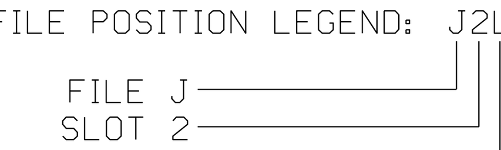
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A[1]	TB2-5,6	I2U	39	1	2	1	Y	Y			15
	-	J4U	48	10	26	6	Y	Y	Y		3
1B	TB2-7,8	I2L	43	5	12	1	Y	Y			15
2A	TB2-9,10	I3U	63	25	32	2	Y	Y			
2B	TB2-11,12	I3L	76	38	42	2	Y	Y			
✱ S1	TB6-9,10	I9U	60	22	11	SYS					
✱ S2	TB6-11,12	I9L	62	24	13	SYS					
6A	TB3-5,6	J2U	40	2	6	6	Y	Y			
6B	TB3-7,8	J2L	44	6	16	6	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			
✱ S3	TB7-9,10	J9U	59	21	15	SYS					
✱ S4	TB7-11,12	J9L	61	23	17	SYS					
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2 PED					
P81,P82	TB8-8,9	I13L	70	32	PED 8	8 PED					

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

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

[1] Add jumper from I2-F to J4-W, on rear of input file.

INPUT FILE POSITION LEGEND: J2L

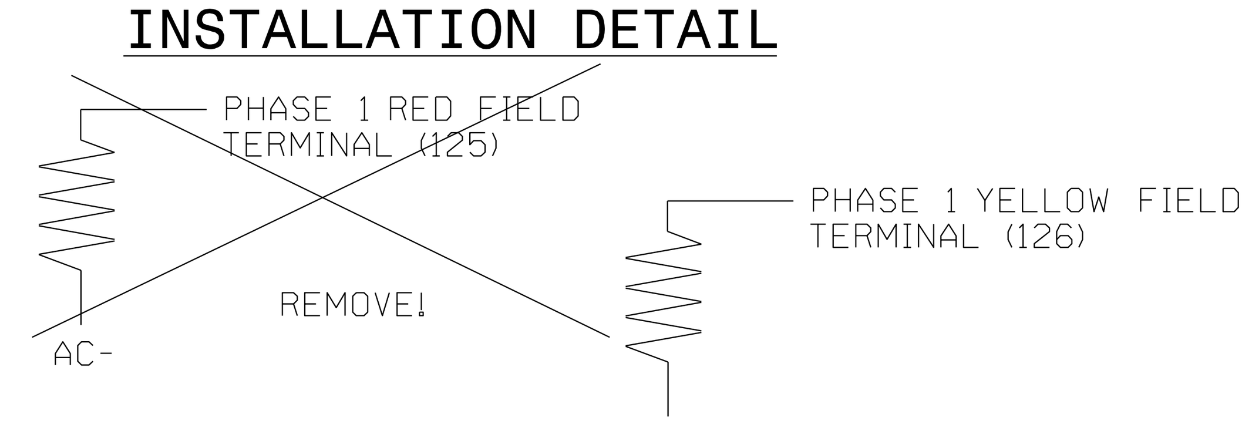


COUNTDOWN PEDESTRIAN SIGNAL OPERATION

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: 03-1080
DESIGNED: JUNE 2014
SEALED: December 19, 2014
REVISED:

Signal Upgrade - Final Design (Electrical Detail Sheet 1 of 2)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 17 Business (Market Street) at Cinema Drive

Division 03 New Hanover County Wilmington

PLAN DATE:	June 2014	REVIEWED BY:	LM Moon
PREPARED BY:	AJ Davis	REVIEWED BY:	MB Toth

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

DocuSigned by: Melissa B. Toth
D86DCF8E04D04AF...
12/19/2014
DATE

SIG. INVENTORY NO. 03-1080