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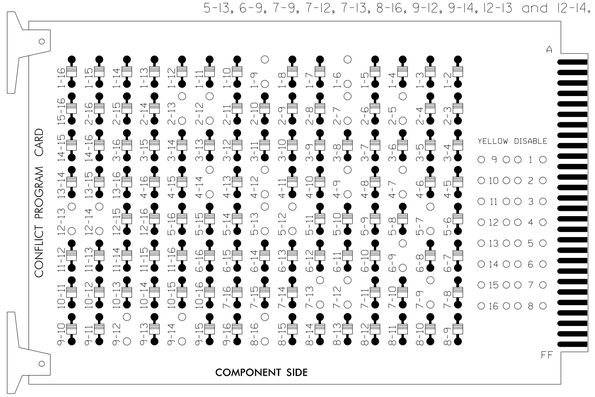
PROJECT REFERENCE NO.	SHEET NO.
R-5816	Sig.1.9

EDI MODEL 2010ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

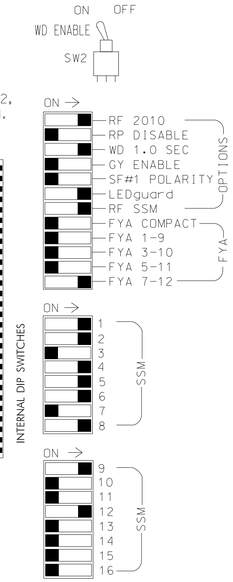
REMOVE DIODE JUMPERS 1-6, 1-9, 2-5, 2-7, 2-12, 2-13, 4-7, 4-9, 4-12, 4-14, 5-7, 5-12, 5-13, 6-9, 7-9, 7-12, 7-13, 8-16, 9-12, 9-14, 12-13 and 12-14.



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. Make sure jumpers SEL2-SEL5 are present on the monitor board.



■ = 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. To prevent red failures on unused monitor channels, see Red Monitor Board Programming Detail this sheet.
3. Enable Simultaneous Gap-Out for all phases.
4. Program phases 2, 4, and 8 for Advanced Walk.
5. Program phases 2 and 5 for First Phases.
6. Program phases 2, 4 and 8 for 'STARTUP PED CALL'.
7. Program overlap 1 as a Wag Overlap.
8. The cabinet and controller are part of the NC 58 Atlantic Beach Closed Loop 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,S2P,S4,S4P,S5,S6,S7,S8, S8P,S9,S13.
PHASES USED.....1,2,4,5,6,8,9,2 PED,4 PED,8 PED.
OVERLAP "A".....4+6+9
OVERLAP "B".....NOT USED
OVERLAP "C".....NOT USED
OVERLAP "D".....4+5+9
OVERLAP "E".....4+9
OVERLAP "F".....5+9

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3	S4			S4P	S5	S6	S6P	S7	S8		S8P	S9	S10	S11	S12	S13	S14
PHASE	1	2	2 PED	3	OLE			4 PED	5	6	6 PED	OLF ★	8		8 PED	OLA	OLB	SPARE	OLC	OLD ★	SPARE
SIGNAL HEAD NO.	11	21,22	P21, P22	NU	41	42	43	P41, P42	51,52	61,62	NU	44,45	81	82,83	P81, P82	63,64	NU	NU	NU	44,45	NU
RED		128				101	101			134				107		A121				A101	
YELLOW		129				102	102			135		✳		108							
GREEN		130				103	103			136				109							
RED ARROW	125				101				131				107								
YELLOW ARROW	126				102				132				108			A122				A102	
FLASHING YELLOW ARROW																				A103	
GREEN ARROW	127				103	103			133			124	109			A123					
✋			113					104							110						
🚶			115					106							112						

NU = Not Used

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

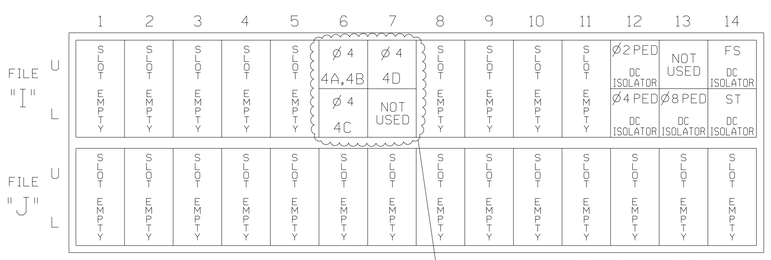
★ See pictorial of head wiring in detail below.

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.

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
ST = STOP TIME

Note: Detector placement is illustrative and coordinates with the detector switching programming provided on Sheet 4 of this detail.

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
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					
P81,P82	TB8-8,9	I13L	70	32	PED 8	8 PED					

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

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

4 SECTION FYA PPLT SIGNAL WIRING DETAIL

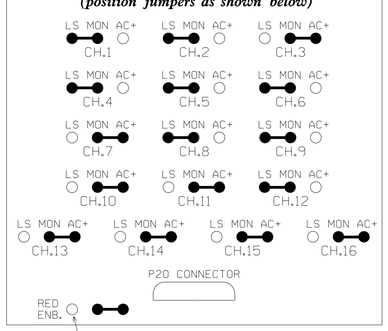
(wire signal heads as shown)

NOTE

1. The sequence display for these signals require special logic programming. See sheet 2 for programming instructions.

RED MONITOR BOARD PROGRAMMING

(position jumpers as shown below)



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)

SPECIAL DETECTOR NOTE

Install a multizone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

ADVANCED WALK NOTE

(program controller as shown below)

From Main Menu press '2' (Phase Control), then '1' (Phase Control Functions). Program phases 2, 4 and 8 for 'Advanced Walk'. Make sure the Walk Advance Time shown on the Signal Design plans are programmed in the 'Phase Timing' menu.

This plan supersedes the plan signed and sealed on 02/26/2019.

ELECTRICAL DETAIL SHEET 1 OF 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
Traffic & Signals Management Section

750 N.Greenfield Pkwy,Garner,NC 27529

NC 58 (Fort Macon Road)
at
SR 1182 (Atlantic Beach Cswy)

Division 2	Carteret County	Atlantic Beach
PLAN DATE: July 2022	REVIEWED BY:	J.L. Lewis
PREPARED BY: M.L. Stygles	REVIEWED BY:	J. Ma

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 033108 ENGINEER JIANXIN MA

DocuSigned by: Jianxin Ma
827E3B0014AE4...
7/26/2022

SIGNATURE DATE

SIG. INVENTORY NO. 02-0256

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 02-0256
DESIGNED: July 2022
SEALED: 7/26/2022
REVISED: N/A

VHB Engineering NC, P.C. (C-3705)
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7/26/2022
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