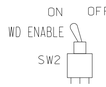
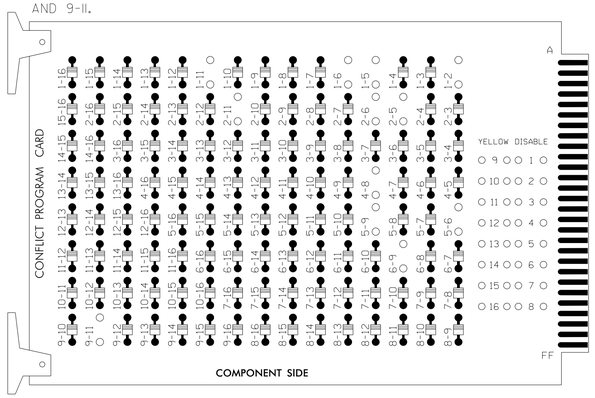
Docusign Envelope ID: C8F16DB8-E22A-4752-95D3-B607B9B7670F

16 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

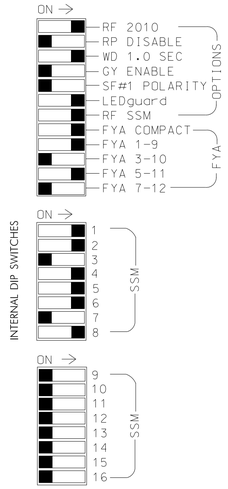
(Confirm jumpers and set switches as shown)



CONFIRM DIODE JUMPERS: I-2, I-5, I-6, I-11, 2-5, 2-6, 2-11, 4-8, 5-6, 5-9, 6-9, AND 9-11.



REMOVE JUMPERS 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. Make sure jumpers SEL2-SEL5 are present on the monitor board.
3. ! Special cabinet wiring is required to utilize FYA COMPACT mode. See Ped Yellow Conflict Monitor Wiring Detail on this sheet. !

INPUT FILE POSITION LAYOUT

(front view)

FILE "I" U / L

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Ø1 1A	SLOT EMPTY	SLOT EMPTY	Ø4 4A	Ø5 5A	Ø6 6A,6B	SLOT EMPTY	Ø8 8A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
⊗ WIRED INPUT			NOT USED	⊗ WIRED INPUT	Ø6 6C,6D		NOT USED						ST DC ISOLATOR

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

⊗ Wired Input - turn off Channel 2.

FS = FLASH SENSE
ST = STOP TIME

REMOVE EXISTING CARD FROM SLOT 2.

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
[1] 1A	TB21-1,2	I1U	56	18	1	1	Y	Y			15
	-	I1L	47	9	22	6	Y	Y			
4A	TB21-7,8	I4U	41	3	4	4	Y	Y			5
[2] 5A	TB21-9,10	I5U	55	17	5	5	Y	Y			15
	-	I5L	48	10	26	2	Y	Y			
6A,6B	TB21-11,12	I6U	40	2	6	6	Y	Y		1.6	
6C,6D	TB23-11,12	I6L	44	6	16	6	Y	Y			
8A	TB22-1,2	I8U	42	4	8	8	Y	Y			5

[1] Confirm jumper from I1-F to I1-W, on rear of input file.

[2] Confirm jumper from I5-F to I5-W, on rear of input file.

INPUT FILE POSITION LEGEND: I2L
FILE I
SLOT 2
LOWER

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
2. Ensure that Red Enable is active at all times during normal operation. To prevent Red Failures on unused monitor channels, tie unused red monitor inputs 3,7,9,10, 11,12,13,14,15 & 16 to load switch AC+ per the cabinet manufacturer's instructions.
3. Verify programming for phases 4 and 8 for Dual Entry.
4. Verify Simultaneous Gap-Out for all phases is enabled.
5. Verify programming for overlap 1 as Wag Overlap.
6. Remove Yellow Flash programming and remove phases 2 and 6 from Start Up in Green.

EQUIPMENT INFORMATION

CONTROLLER.....2070L
CABINET.....McCAIN/CONTROL TECHNOLOGIES
(DWG.NO.9500-336-NCDOT)
SOFTWARE.....ECONOLITE OASIS
CABINET MOUNT.....POLE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED.....S1,S2,S2P,S4,S5,S6,S6P,S8.
PHASES USED.....1,2,4,5,6,8.
OVERLAP "A".....1+2
OVERLAP "B".....NOT USED
OVERLAP "C".....5+6
OVERLAP "D".....NOT USED

PED YELLOW CONFLICT MONITOR WIRING DETAIL

(Verify cabinet wiring changes as shown below)

Maintain existing wiring for FYA COMPACT mode. Wiring should be verified to be as shown below.

In order to use FYA COMPACT mode on the 2010ECL-NC Monitor, the cabinet must be wired such that the (unused) Ped Yellow load switch outputs are wired to the conflict monitor as follows: From 2 PY (field term. 114) to chan. 9 green (monitor pin 13), and from 6 PY (field term. 120) to chan. 10 green (monitor pin R).

Verify the appropriate connections:

STEP 1: Fold down rear panel of output file.

STEP 2: Find unused wiring harness from conflict monitor card edge connector (which should be tied and bundled together).

STEP 3: Find the conductors that correspond to the following conflict monitor card edge pins and verify wires are soldered to the appropriate terminal on the rear of the output file as shown below:

CMU-13 ———————— 2PY (term. 114)

CMU-R ———————— 6PY (term. 120)

NOTE: Some cabinet manufacturers use a molex plug to accomplish this wiring configuration. If connectors are used, verify that the two connectors are plugged together which are labeled with the pin-out as shown above.

SPECIAL DETECTOR NOTE

Install a multi-zone microwave detection system for vehicle detection for 2A. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

Plans Prepared By:
DRMP
DRMP, INC.
8210 UNIVERSITY EXECUTIVE PARK DR.
SUITE 220
CHARLOTTE, NC 28262
NC LICENSE NO. F-1524 (704) 549-4260

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P		S3	S4	S4P	S5	S6	S6P		S7	S8	S8P
CMU CHANNEL NO.	1	2	9	13	3	4	14	5	6	11	15	7	8	16
PHASE	OLA	2	1 GRN	2 PED	3	4	4 PED	OLC	6	5 GRN	6 PED	7	8	8 PED
SIGNAL HEAD NO.	11★	21,22	11★	NU	NU	41,42	NU	51★	61,62	51★	NU	NU	81,82	NU
RED		128				101			134				107	
YELLOW		129				102			135				108	
GREEN		130				103			136				109	
RED ARROW	125							131						
YELLOW ARROW	126							132						
FLASHING YELLOW ARROW	127							133						
GREEN ARROW			114							120				
				*							*			

NU = Not Used

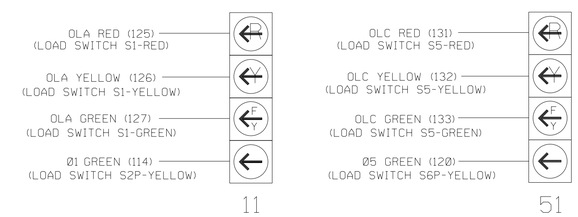
* Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail below.

NOTE: Load Switches S1, S2P, S5 and S6P required output remapping. Maintain existing remapping. See sheets 3 and 4 of this electrical detail for additional details.

4 SECTION FYA PPLT SIGNAL WIRING DETAIL

(Verify signal heads as shown)

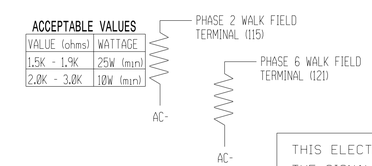


NOTE

1. The sequence display for these signals required special logic and output remapping. Maintain existing logic and output remapping. See sheet 2 for programming details.

LOAD RESISTOR INSTALLATION DETAIL

(Verify resistors as shown below)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 14-0694TI
DESIGNED: Aug 2025
SEALED: 8/26/2025
REVISED: N/A

Electrical Detail - Sheet 1 of 4
Temporary Design 1 - TMP Ph1, S1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

NC 107 (E. Main Street)
at
SR 1352 (Walter Ashe Road) / SR 1449 (Cope Creek Road)

Division 14 Jackson County Sylva

PLAN DATE: August 2025	REVIEWED BY: ZM Esposito
PREPARED BY: F Vazquez	REVIEWED BY: BN Groome

REVISIONS	INIT.	DATE

Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Traffic Engineering & Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 052936 ENGINEER BRITTANY N GROOME

Signed by: Brittany Groome 8/26/2025
TED93A0E1D5A4B4... DATE

SIG. INVENTORY NO. 14-0694TI

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