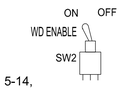
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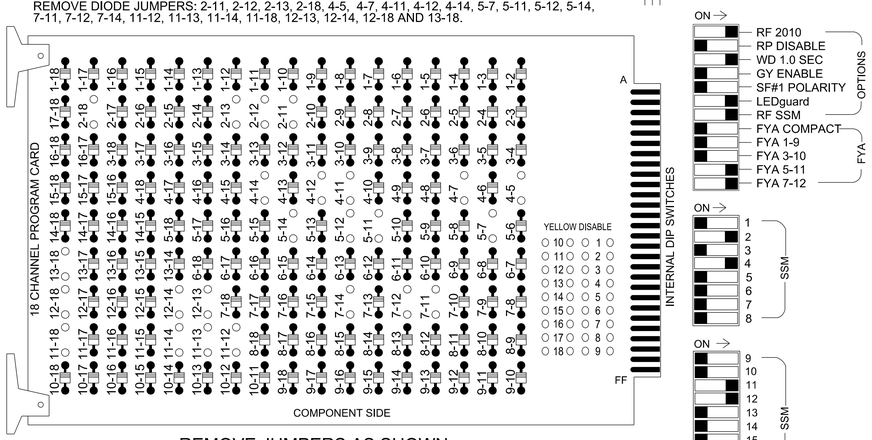
PROJECT REFERENCE NO.	SHEET NO.
U-3422B	Sig-5.7

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



REMOVE DIODE JUMPERS: 2-11, 2-12, 2-13, 2-18, 4-5, 4-7, 4-11, 4-12, 4-14, 5-7, 5-11, 5-12, 5-14, 7-11, 7-12, 7-14, 11-12, 11-13, 11-14, 11-18, 12-13, 12-14, 12-18 AND 13-18.



■ = 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 the 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 vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
2. Program phases 4 and 7 for Dual Entry.
3. Program controller to start up in phase 2 Green No Walk and phase 6 Phase Not On.
4. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
5. The cabinet and controller are part of the Camden Road Closed Loop Signal System.

EQUIPMENT INFORMATION

Controller.....2070LX
Cabinet.....332 w/ Aux
Software.....Q-Free MAXTIME
Cabinet Mount.....Base
Output File Positions.....18 With Aux. Output File
Load Switches Used.....S2, S3, S5, S6, S7, S10, AUX S4, AUX S5, AUX S6
Phases Used.....2, 2 PED, 4, 4 PED, 7
Overlap "1".....NOT USED
Overlap "2".....NOT USED
Overlap "3".....*
Overlap "4".....*
Overlap "5".....NOT USED
Overlap "6".....*
Overlap "7".....*

*See overlap programming detail on sheet 2.

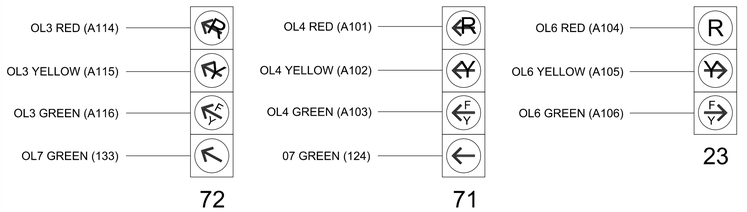
SIGNAL HEAD HOOK-UP CHART

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	OL7	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	OL6
SIGNAL HEAD NO.	NU	21,22	P21, P22	NU	41,42	P41, P42	72★	NU	NU	71★	NU	NU	NU	NU	NU	72★	71★	23★
RED		128			101													A104
YELLOW		129					*			*								
GREEN		130																
RED ARROW																A114	A101	
YELLOW ARROW					102											A115	A102	A105
FLASHING YELLOW ARROW																A116	A103	A106
GREEN ARROW					103		133			124								
✋			113			104												
🚶			115			106												

NU = Not Used
★ See pictorial of head wiring in detail this sheet.
* Denotes install load resistor. See load resistor installation detail this sheet.
** Channel has been reassigned to Overlap 7. See detail on sheet 2 for reassignment programming

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	1O	11	12	13	14
FILE "I"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	∅ 2 PED DC ISOLATOR	SLOT EMPTY	FS DC ISOLATOR
	L												∅ 4 PED DC ISOLATOR		ST DC ISOLATOR
FILE "J"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L														

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 POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
2A	-	-	-	*	38	2			X		X	
4A	-	-	-	*	44	4	15,0		X		X	
7A	-	-	-	*	36 ★	7	15,0		X		X	
PED PUSH BUTTONS												
P21,P22, PB23	TB8-4,6	I12U	67	33	2	PED 2						
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						

NOTE:
INSTALL DC ISOLATOR IN INPUT FILE SLOT I12.

★ For Input Point numbers, see SDLC Non-Intrusive Detection Chart on sheet 2.
★ For the detectors to work as shown on the signal design plan, see the Vehicle Detector Setup Programming Detail for Alternate Phasing on sheet 2.

INPUT FILE POSITION LEGEND: J2L
J2L: FILE J, SLOT 2, LOWER

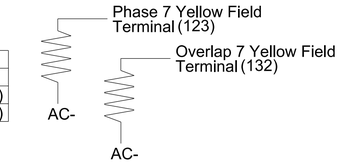
SPECIAL DETECTOR NOTE

Install a multizone microwave detection zone for approaches 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.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters

StartUp Clearance Hold
6

Unit Flash Parameters

All Red Flash Exit Time
6

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.

Plans Prepared By:

DRMP

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8210 University Executive Park Dr, Suite 220
Charlotte, NC 28262
NC License No. F-1524 (704) 549-4260

THIS PLAN SUPERSEDES THE PLAN SEALED ON 12/22/2023

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 06-1309
DESIGNED: Sep 2026
SEALED: 09/11/2026
REVISED: N/A

Electrical Detail - Sheet 1 of 2
Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

SR 1003 (Camden Road) EB
at
South Peak Drive

Division 6 Cumberland County Hope Mills

PLAN DATE: September 2026 REVIEWED BY: BN Groome
PREPARED BY: DS Griffith DRMP PROJ. NO.: 24941

REVISIONS	INIT.	DATE

Prepared for:
North Carolina Department of Transportation Traffic Engineering Branch Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 052936 ENGINEER BRITTANY N GROOME

Signed by: Brittany Groome 1E09340E1D44464...
09/11/2026
SIGNATURE DATE

SIG. INVENTORY NO. 06-1309