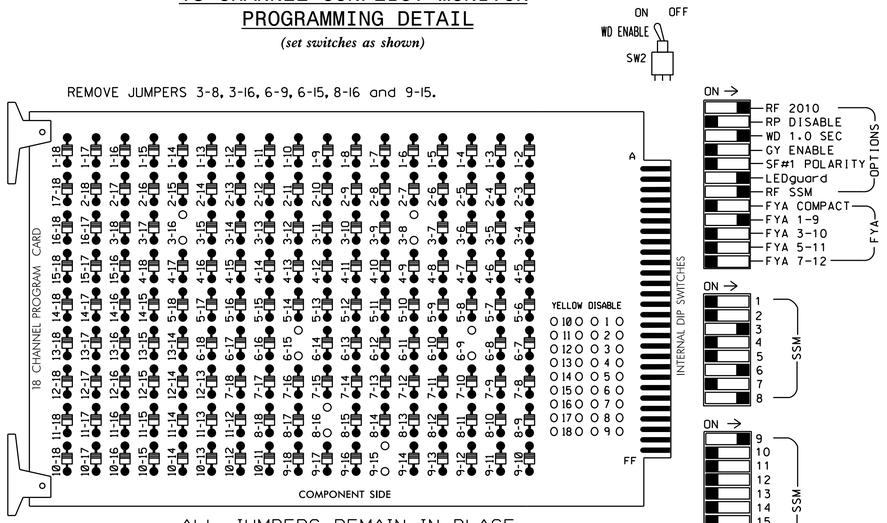
PROJECT REFERENCE NO.	SHEET NO.
U-5302	Sig.16.1

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(set switches as shown)



ALL JUMPERS REMAIN IN PLACE

■ = 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. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø3 3A	SLOT EMPTY	SLOT EMPTY	SYS. DET. S17	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L						Ø3 3B			SYS. DET. S18				Ø8 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	SLOT EMPTY	Ø6 6A	Ø6 6C	SLOT EMPTY	SLOT EMPTY	Ø8 8A	SLOT EMPTY	SLOT EMPTY	SYS. DET. S19	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L		Ø6 6B	NOT USED			Ø8 8B			NOT USED					

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

FS = FLASH SENSE
ST = STOP TIME

INIT & N.A. RESP PROGRAMMING DETAIL

1. From Main Menu select 3 - PHASE DATA
2. From PHASE DATA Submenu select 4 - INIT & N.A RESP

Note Phases 1, 4, 5 and 7 NOT used! →

```
PHASE......1...2...3...4...5...6...7...8
 INITIAL   0   6   1   0   0   6   0   1
 NA RESP   0   1   0   2   0   1   0   2
 UPDT GRN  0   0   0   0   0   0   0   0

CODES.....0....1....2....3....4....5...6
 INITL  NONE INACT RED  YEL  GRN  DRK G/DW
 NA RSP NONE  NA1  NA2  1&2  ---  --- ---
                                      ***
```

INIT & N.A. RESP PROGRAMMING COMPLETE

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. Program controller to start up in phases 2 and 6 Green/ Don't Walk.
3. Enable simultaneous gap-out feature for all phases.
4. Program phases 3 and 8 for dual entry.
5. Program phase 6 for volume density operation.
6. The cabinet and controller are part of the Raleigh Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070LX
CABINET.....332 W/ AUX
SOFTWARE.....SE-PAC2070 ver 5.5 or later
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED.....S4,S8,S9,S11,S12,AUX S1
PHASES USED.....*2,3,6,8
OVERLAP "A".....**
OVERLAP "B".....NOT USED
OVERLAP "C".....NOT USED
OVERLAP "D".....NOT USED

* Phase used for timing purposes only.
** See overlap programming detail on sheet 2.

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	DETECTOR NO.	NEMA PHASE	DELAY TIME	EXTEND (STRETCH) TIME
3A	TB4-9,10	I6U	41	11	3		
3B	TB4-11,12	I6L	45	12	3		
6A	TB3-5,6	J2U	40	21	6		
6B	TB3-7,8	J2L	44	22	6		
6C	TB3-9,10	J3U	64	23	6		
8A	TB5-9,10	J6U	42	31	8	15	
8B	TB5-11,12	J6L	46	32	8	15	
* S17	TB6-9,10	I9U	60	17	SYS		
* S18	TB6-11,12	I9L	62	18	SYS		
* S19	TB7-9,10	J9U	59	37	SYS		
PED PUSH BUTTONS							
P61,P62	TB8-7,9	I13U	68	PED 6	6 PED		
P81,P82	TB8-8,9	I13L	70	PED 8	8 PED		

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOT I13.

* System Detector only. Remove the vehicle phase assigned to this detector in the default programming.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

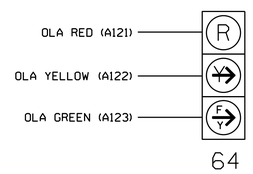
SIGNAL HEAD HOOK-UP CHART

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.	NU	NC	NU	31,32	NU	NU	NU	61	62,63	P61, P62	NU	81,82	P81, P82	64★	NU	NU	NU	NU	NU
RED								134	134			107		A121					
YELLOW								135	135										
GREEN									136										
RED ARROW				116															
YELLOW ARROW				117								108		A122					
FLASHING YELLOW ARROW														A123					
GREEN ARROW				118				136				109							
✋										119			110						
🚶										121			112						

NU = Not Used
NC = Not Connected
★ See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



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.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-1812
DESIGNED: February 2025
SEALED: 03/27/2025
REVISED: N/A

Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

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

US 401 SB (Fayetteville Road) at Purser Drive

Division 5 Wake County Raleigh

PLAN DATE: March 2025 REVIEWED BY:
PREPARED BY: S.Kirkpatrick REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 036833 ENGINEER RYAN W. HOUGH
Signed by: Ryan W. Hough
43C0320EA2A9AC5... 03/28/2025
SIGNATURE DATE
SIG. INVENTORY NO. 05-1812

27-MAR-2025 15:43
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sdkirkpatrick