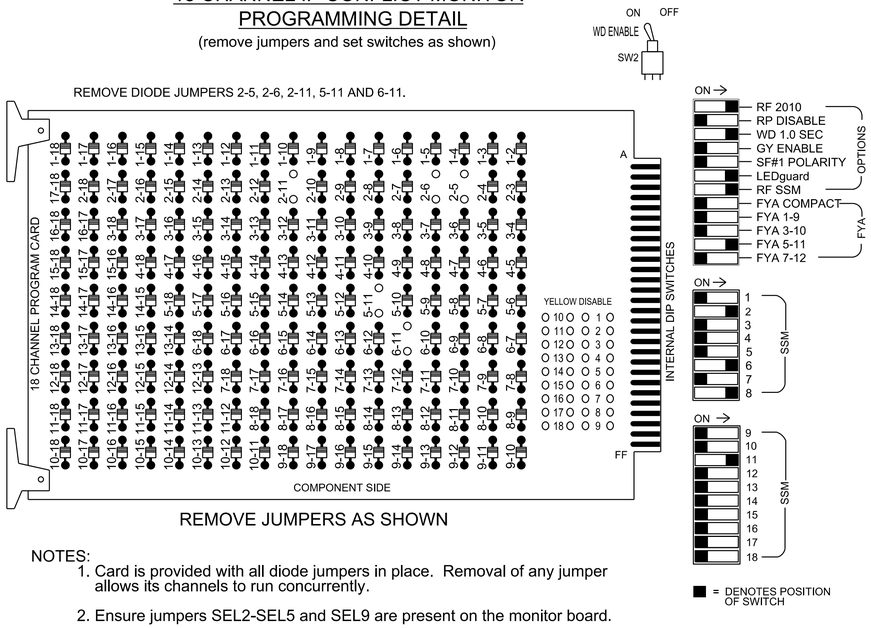
PROJECT REFERENCE NO.	SHEET NO.
U-6018	Sig-6.1

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



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. Integrate monitor with Ethernet network in cabinet.

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	WIRED INPUT ⊗	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
	L														ST DC ISOLATOR
FILE "J"	U	Ø5 5A	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	NOT USED													

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

FS = FLASH SENSE
ST = STOP TIME

⊗ Wired Input - Do not populate slot with detector card

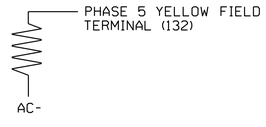
REMOVE ALL INPUT FILES TO MATCH THE ABOVE POSITION LAYOUT

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)

ACCEPTABLE VALUES

VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



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. Program controller to startup in phase 2 Green and 6 Green.
3. The cabinet and controller are part of the High Point Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070LX
CABINET.....332 W/ AUX
SOFTWARE.....ECONOLITE ASC/3-2070
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED.....S2,S7,S8,S11,AUX S4
PHASES USED.....2,5,6,8
OVERLAP "A".....NOT USED
OVERLAP "B".....NOT USED
OVERLAP "C".....✳
OVERLAP "D".....NOT USED

✳ See overlap programming on this sheet.

SPECIAL DETECTOR NOTE

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

For Detection Zone 5A, the equipment and slot reserved for wired input is typical for an NCDOT installation.

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND TIME	DELAY TIME	ADDED INITIAL	DETECTOR TYPE
5A[1]	TB3-1,2	J1U	55	5 ★	5	YES		15		N
	-	I4U	47	22★	2	YES		3		G

[1]Add jumper from J1-W to I4-W, on rear of input file.
★See vehicle detector setup programming detail for alternate phasing on sheet 2.

ECONOLITE ASC/3-2070 OVERLAP PROGRAMMING DETAIL

(program controller as shown)

1. From Main Menu select 2. CONTROLLER
2. From CONTROLLER Submenu select 2. VEHICLE OVERLAPS

Toggle Until 'Overlap C'

OVERLAP C

Select TMG VEH OVLP [C] and 'PPLT FYA'

TMG VEH OVLP...[C] TYPE: .....PPLT FYA

PROTECTED LEFT TURN.... PHASE 5
OPPOSING THROUGH..... PHASE 6

FLASHING ARROW OUTPUT.....CH11 ISOLATE

DELAY START OF: FYA..0.0 CLEARANCE..0.0
ACTION PLAN SF BIT DISABLE..... 5 ← NOTICE ACTION PLAN SF BIT 5

END PROGRAMMING

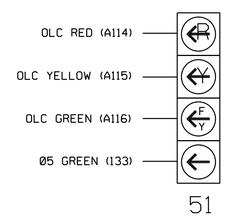
SIGNAL HEAD HOOK-UP CHART

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	21	22	NU	NU	NU	NU	51★	61	62	NU	NU	81,82, 83	NU	NU	NU	NU	51★	NU	NU
RED		128	128						134	134			107							
YELLOW		129	129					✳	135	135			108							
GREEN		130								136			109							
RED ARROW																		A114		
YELLOW ARROW																		A115		
FLASHING YELLOW ARROW																		A116		
GREEN ARROW			130					133	136											

NU = Not Used
★ See pictorial of head wiring in detail this sheet.
✳ Denotes install load resistor. See load resistor installation detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 07-2091T1
DESIGNED: Mar 2025
SEALED: 3/17/2025
REVISED: N/A

Electrical Detail - Sheet 1 of 3
Temporary Design 1 - (TMP Phase I)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

NC 62 (Liberty Road) at I-85 Northbound Ramps

Division 7 Guilford County Archdale

PLAN DATE: March 2025 REVIEWED BY: ZM Esposito
PREPARED BY: AW Poole RKA PROJ. NO.: 17380 (040)

REVISIONS	INIT.	DATE

750 N.Greenfield Pkwy,Garner,NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 054155 ENGINEER ZACHARY M. ESPOSITO

Signed by: Zachary M. Esposito 3/17/2025
DocuSigned by: SIGNATURE DATE
SIG. INVENTORY NO. 07-2091T1

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