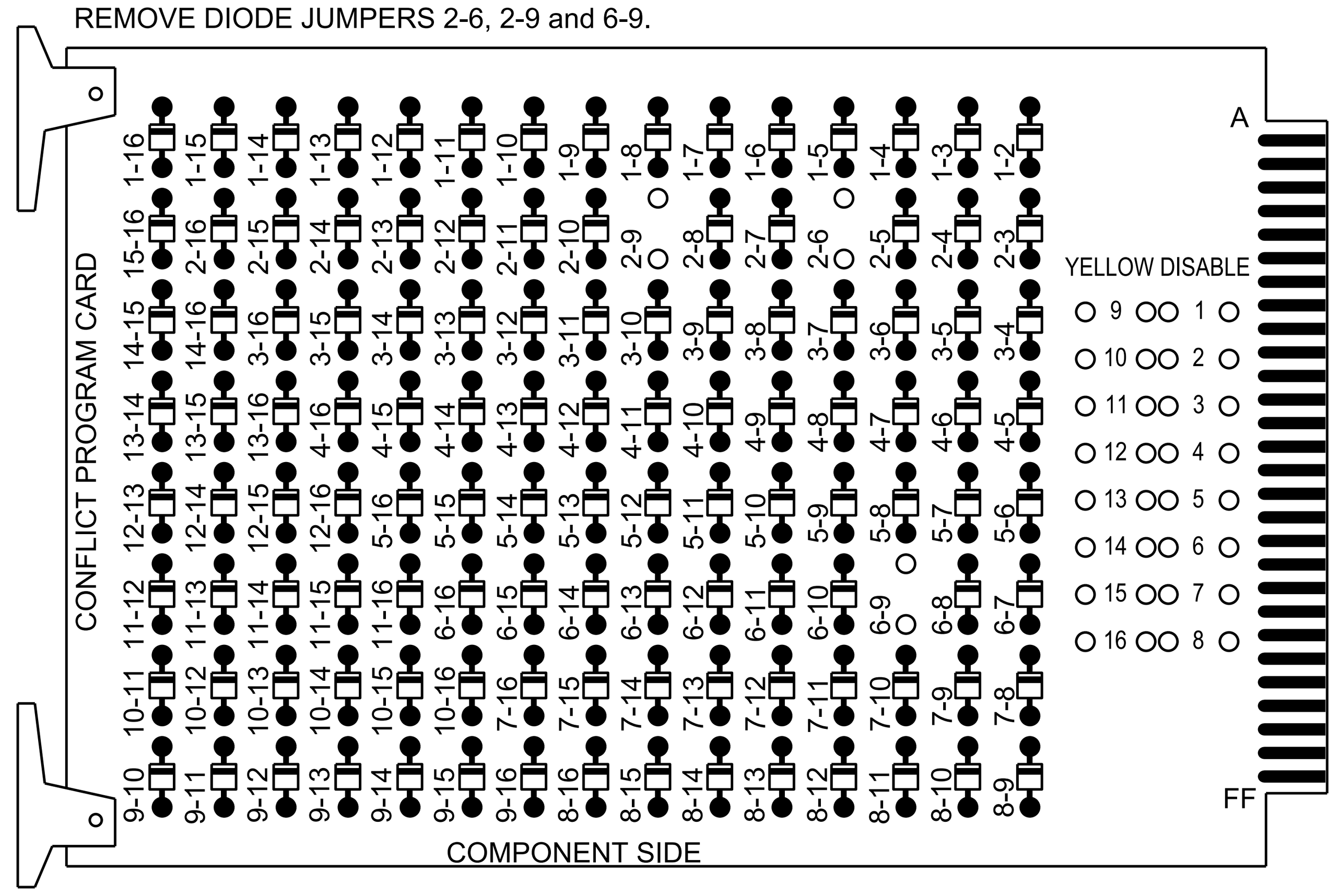
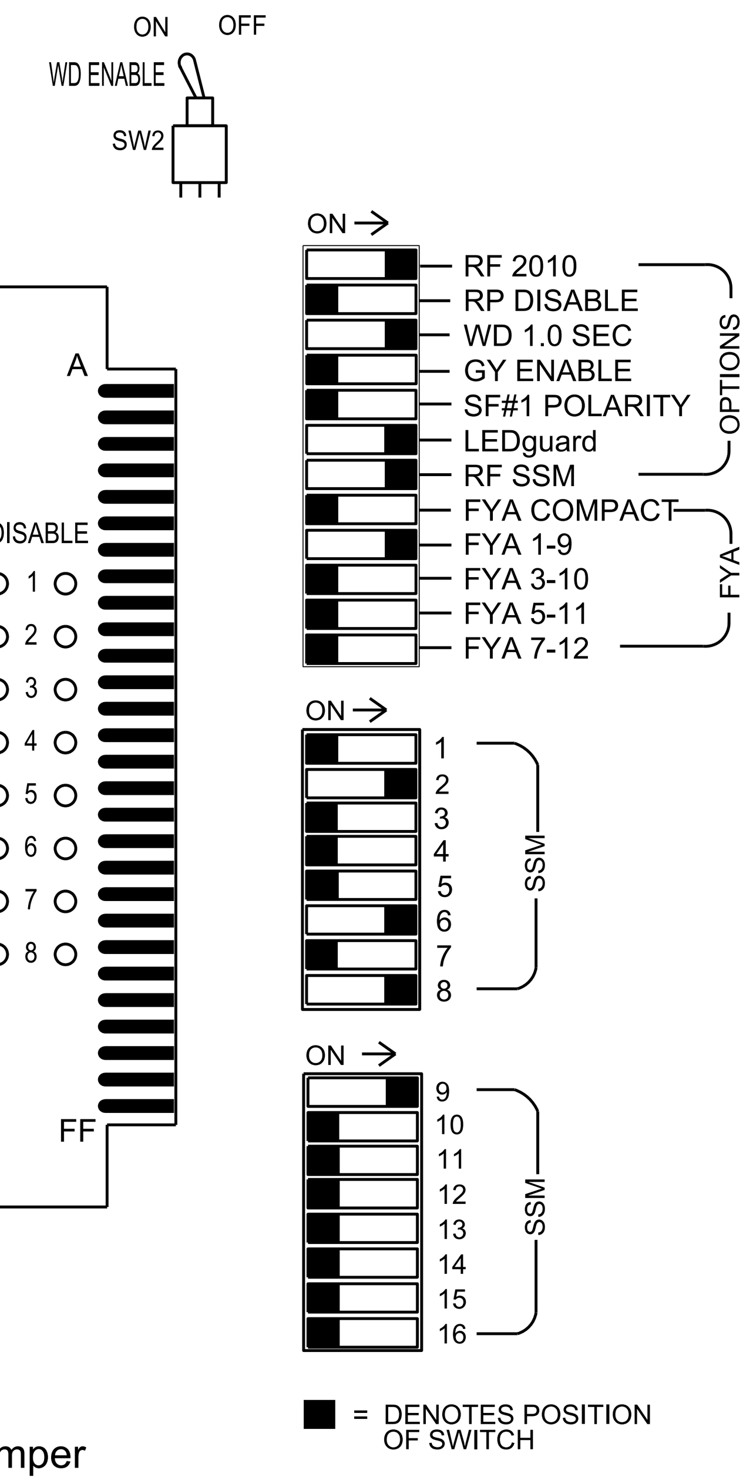
16 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 2-6, 2-9 and 6-9.





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.

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 plan.
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 1,3,4,5,7,10,11, 12,13,14,15 & 16 to AC+ per the cabinet manufacturer's instructions.
3. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
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 NC 56 (Butner) CLS.
   Signal System #: D05-56_Butner

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, S6, S8, S9
Phases Used..2, 6, 8
Overlap "1"..*
Overlap "2"..Not Used
Overlap "3"..Not Used
Overlap "4"..Not Used

*See overlap programming detail on this sheet

PROJECT REFERENCE NO.	SHEET NO.
U-6020	Sig. 8.1

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
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	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	NU	NU	NU	NU	61,62	NU	NU	81,82, 83	NU	63★	NU	NU	NU	NU	NU
RED		128						134			107							
YELLOW		129						135										
GREEN		130						136										
RED ARROW													A121					
YELLOW ARROW											108		A122					
FLASHING YELLOW ARROW													A123					
GREEN ARROW											109							

NU = Not Used

★See pictorial of head wiring in detail this sheet.

INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT EMPTY	ø 2 2A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
	L		NOT USED												ST DC ISOLATOR
FILE "J"	U	SLOT EMPTY	ø 6 6A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	ø 8 8A	SLOT EMPTY	SLOT EMPTY	SYS. DET. S6	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L		ø 6 6B				ø 8 8B			NOT USED					

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	TB2-5,6	I2U	39	1	2	2			X		X	
6A	TB3-5,6	J2U	40	2	16	6			X		X	
6B	TB3-7,8	J2L	44	6	17	6			X		X	
8A	TB5-9,10	J6U	42	4	22	8	3.0		X		X	
8B	TB5-11,12	J6L	46	8	23	8	10.0		X		X	
*S6	TB7-9,10	J9U	59	21	27	SYS						

*System detector only. Remove any assigned vehicle phase.

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

OVERLAP PROGRAMMING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

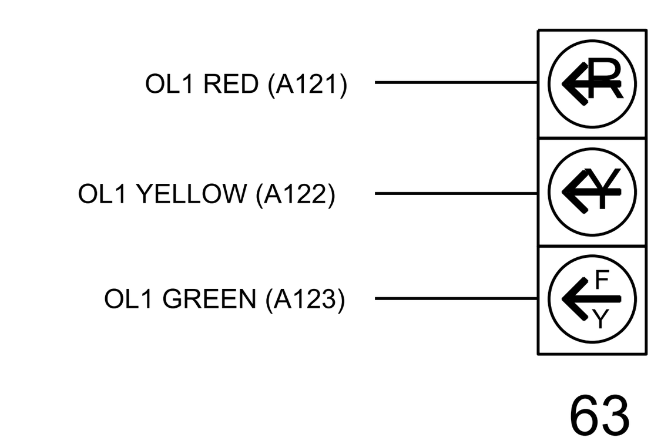
Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	1
Type	FYA 4 - Section
Included Phases	2
Modifier Phases	-
Modifier Overlaps	-
Trail Green	0
Trail Yellow	0.0
Trail Red	0.0

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-0929
DESIGNED: February 2024
SEALED: 03/14/2024
REVISED: N/A

Electrical Detail

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical and Programming Details For:

NC 56
at
SR 1104 (E. Lyon Station Rd.)

Division 5 Granville County Butner

PLAN DATE: March 2024 REVIEWED BY:
PREPARED BY: Sarah Kirkpatrick REVIEWED BY:

REVISIONS	INIT.	DATE

Prepared in the Offices of:
Transportation Mobility and Safety Division
ITS & Signals Management Section
750 N. Greenfield Pkwy, Garner, NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036833 RYAN W. HOUGH

DocuSigned by: Ryan W. Hough 03/15/2024 DATE

SIG. INVENTORY NO. 05-0929