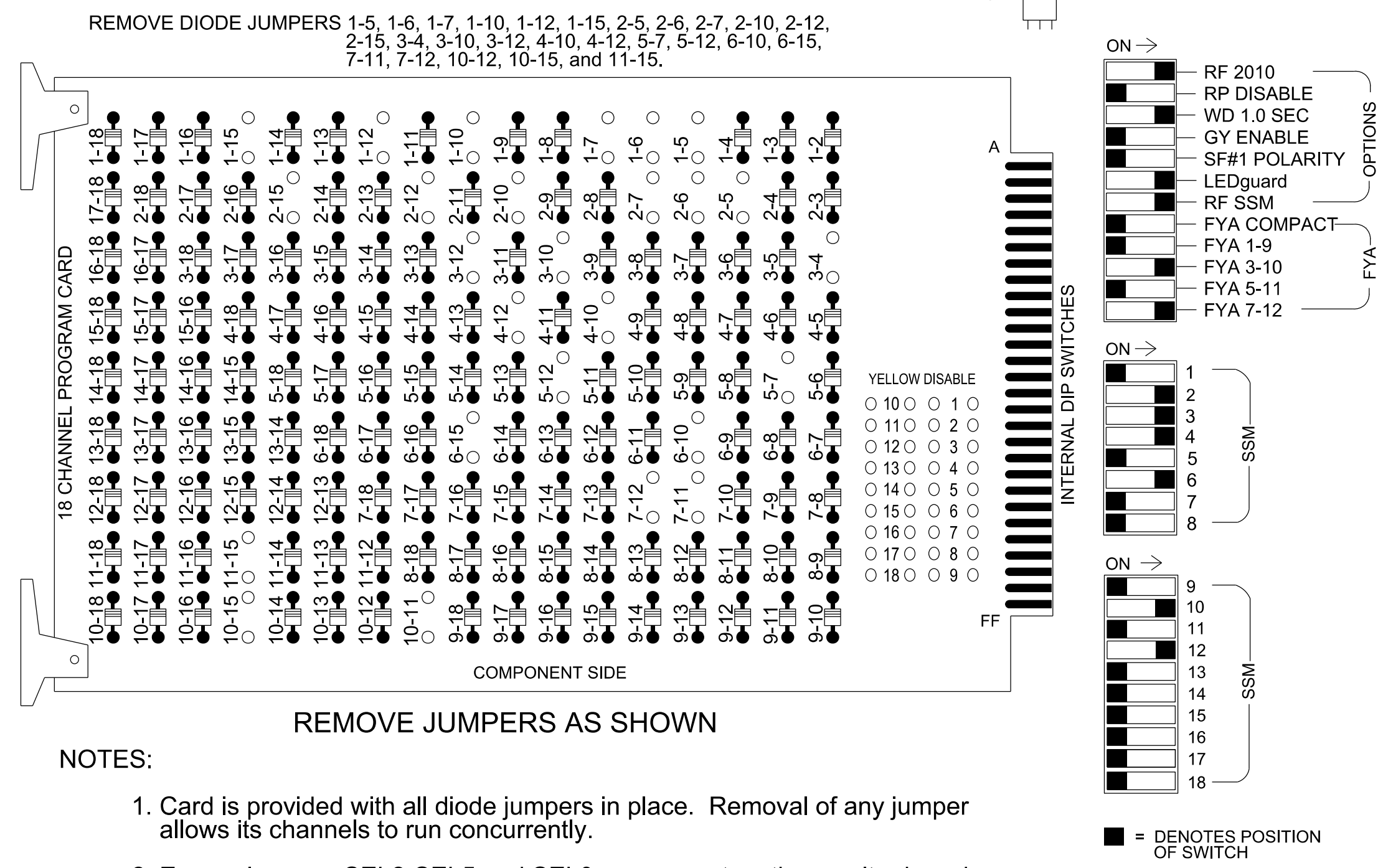


18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



- NOTES:
- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
 - Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
 - Ensure that the Red Enable is active at all times during normal operation.
 - Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

NOTES

- 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.
- Program controller to start up in phase 2 Green No Walk and phase 6 Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the Wilkesboro closed loop 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.....S1,S2,S4,S5,S7,S8,S9,S10,AUXS2,AUXS5
Phases Used.....1,2,4,5,6,6PED
Overlap "1".....NOT USED
Overlap "2".....*
Overlap "3".....*
Overlap "4".....*
Overlap "7".....*
Overlap "8".....*

*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	OL7	4	4 PED	5	6	6 PED	OL8	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE	
SIGNAL HEAD NO.	11,12, 13,14	21,22	NU	63 *	41	42,43	NU	51	61,62	P61, P62	44 *	NU	NU	NU	63 *	NU	NU	44 *	NU
RED		128			101	101			134						A124				A101
YELLOW		129		*	102	102			135		*								
GREEN		130			103	103			136										
RED ARROW	125								131										
YELLOW ARROW	126								132						A125				A102
FLASHING YELLOW ARROW															A126				A103
GREEN ARROW	127			118	103		133			124									
Hand										119									
Foot													121						

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

INPUT FILE POSITION LAYOUT

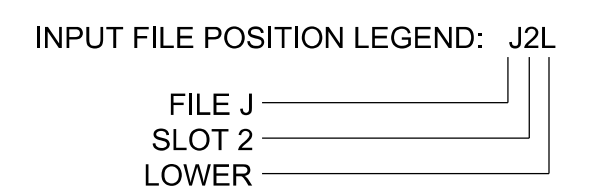
(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	∅ 1 1A	∅ 2 1B	∅ 2 1D	∅ 2 2B	∅ 1 FS	∅ 4 4A	∅ 4 4C	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 6 PED DC ISOLATOR	FS DC ISOLATOR
	NOT USED	∅ 2 1C	∅ 2 2A	NOT USED	∅ 1 FS	∅ 4 4B	NOT USED	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	NOT USED DC ISOLATOR	
"J"	∅ 5 5A	∅ 6 5B	∅ 6 6A	∅ 6 6B	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS
	NOT USED	NOT USED	∅ 6 6B	∅ 6 6B	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS	∅ 1 FS

EX.: 1A, 2A, ET.C. = LOOP NO.'S
FS = FLASH SENSE
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

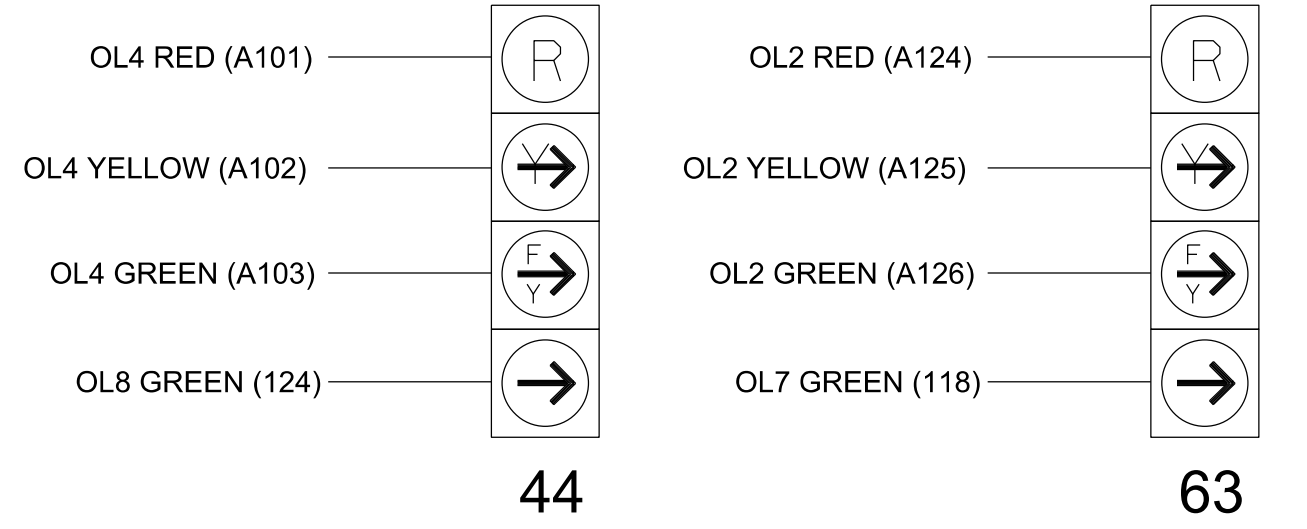
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	QUEUE	CALL	DELAY DURING GREEN
1A	TB2-1,2	I1U	56	18	1	1				X		X	
1B	TB2-5,6	I2U	39	1	2	1				X		X	
1C	TB2-7,8	I2L	43	5	3	1				X		X	
1D	TB2-9,10	I3U	63	29	4	1				X		X	
2A	TB2-11,12	I3L	76	42	5	2				X	X	X	
2B	TB4-1,2	I4U	47	9	6	2				X	X	X	
4A	TB4-9,10	I6U	41	3	8	4				X		X	
4B	TB4-11,12	I6L	45	7	9	4				X		X	
4C	TB6-1,2	I7U	65	31	10	4				X		X	
4D	TB6-3,4	I7L	78	44	11	4				X		X	
5A	TB3-1,2	J1U	55	-	17	5				X		X	
					31	2	3			X		X	X
5B	TB3-5,6	J2U	40	2	16	5				X		X	
6A	TB3-9,10	J3U	64	30	18	6				X	X	X	
6B	TB3-11,12	J3L	77	43	19	6				X	X	X	
P61,P62	TB8-7,9	I13U	68	34	6	6				X		X	



NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOT I13.

FYA SIGNAL WIRING DETAIL

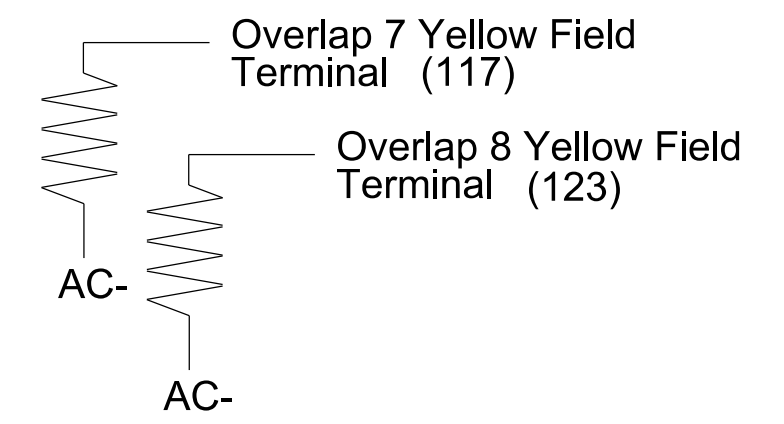
(wire signal heads as shown)



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)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 11-0944
DESIGNED: May 2023
SEALED: 5/26/2023
REVISED: N/A

Electrical Detail-Sheet 1 of 3

ELECTRICAL AND PROGRAMMING DETAILS FOR:

US 421 Business at SR 1185 (Curtis Bridge Rd)

Division 14 Henderson County Hendersonville
PLAN DATE: May 2023 REVIEWED BY: M.L. Stygles
PREPARED BY: J. Ma REVIEWED BY:

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 046057
MATTHEW L. STYGLES

DocuSigned by:
Matthew L. Stygles
304B815E4452AC
DATE: 5/26/2023
SIG. INVENTORY NO. 11-0944



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED