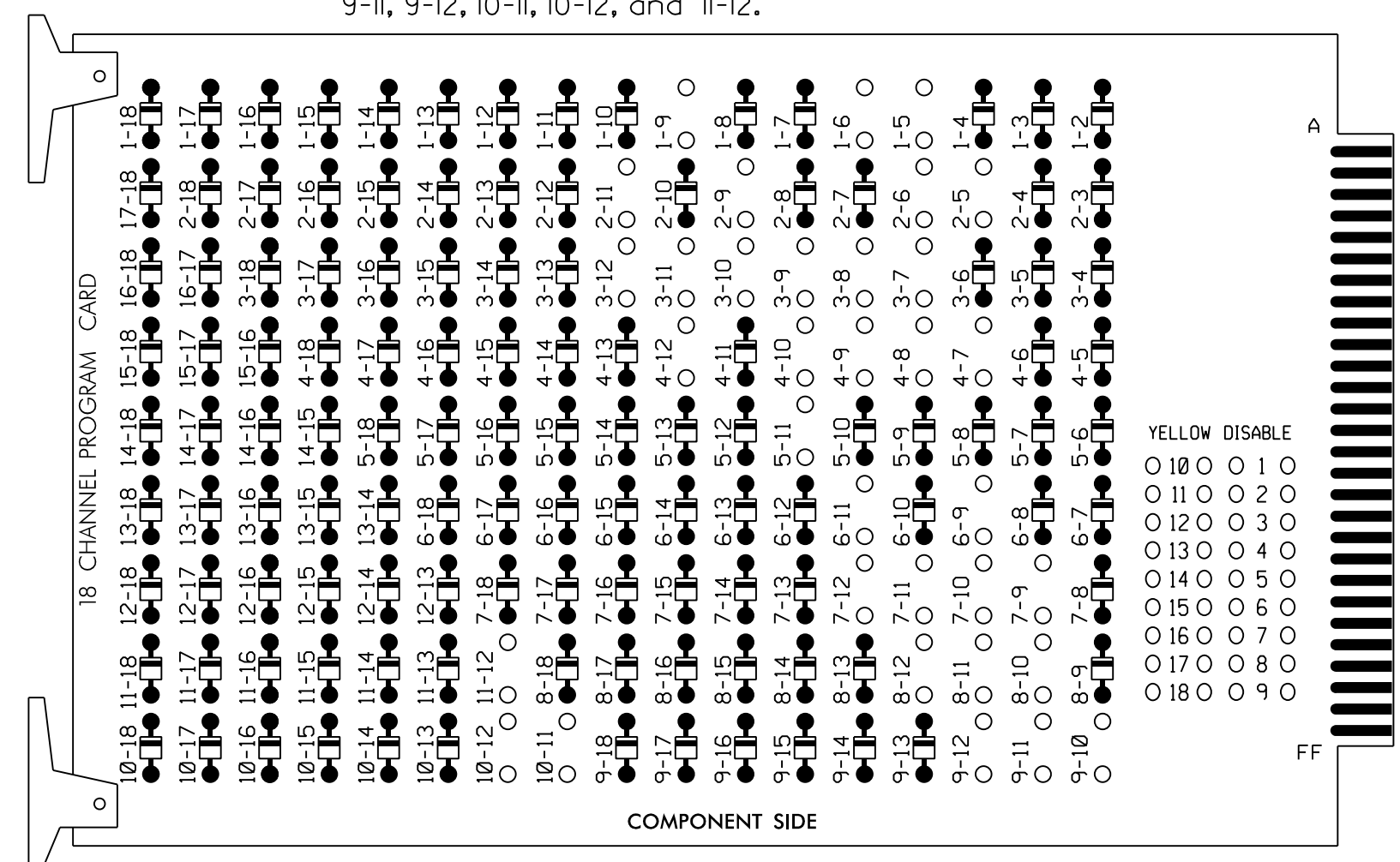


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

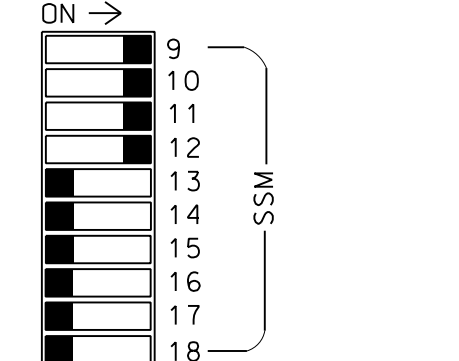
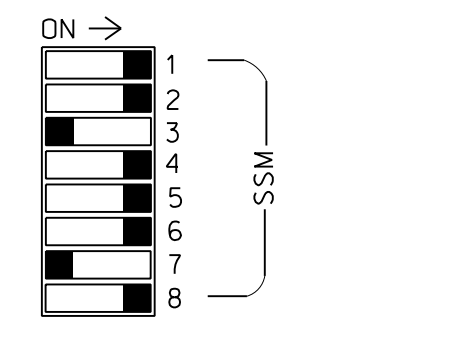
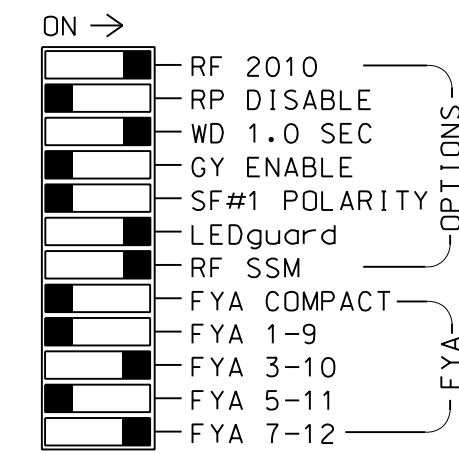
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 2-5, 2-6, 2-9, 2-11, 3-7, 3-8, 3-9, 3-10, 3-11, 3-12, 4-7, 4-8, 4-9, 4-10, 4-12, 5-11, 6-9, 6-11, 7-9, 7-10, 7-11, 7-12, 8-10, 8-11, 8-12, 9-10, 9-11, 9-12, 10-11, 10-12, and 11-2.



REMOVE JUMPERS 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 Red Enable is active at all times during normal operation.
- Integrate monitor with Ethernet network in cabinet.



■ = DENOTES POSITION OF SWITCH

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 Plans.
- Program phases 4 and 8 for Dual Entry.
- Program controller to start up in phase 2 Green and 6 Green.
- 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.....S1,S2,S4,S5,S7,S8,S10,S11,
 AUX S1,AUX S2,AUX S4,AUX S5
 PHASES USED.....1,2,3,4,5,6,7,8
 OVERLAP "A".....*
 OVERLAP "B".....*
 OVERLAP "C".....*
 OVERLAP "D".....*
 * 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	5	6	6 PED	7	8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21,22,23	NU	31	41,42,43	NU	51	61,62	NU	71	81,82,83	NU	63	31	NU	24	71	NU
RED		128			101			134			107		A121				A114	
YELLOW		129		*	102			135		*	108							
GREEN		130			103			136			109							
RED ARROW	125							131						A124			A101	
YELLOW ARROW	126							132					A122	A125		A115	A102	
FLASHING YELLOW ARROW													A126				A103	
GREEN ARROW	127			118				133			124		A123			A116		

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

INPUT FILE POSITION LAYOUT

(front view)

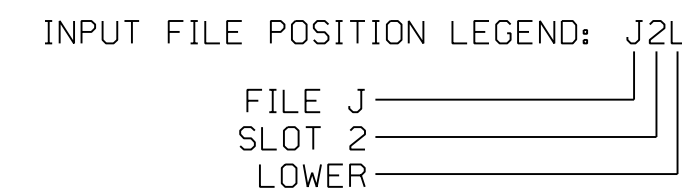
FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	∅ 1 1A	∅ 2 2A	∅ 3 3A	∅ 4 4A	∅ 5 5A	∅ 6 6A	∅ 7 7A	∅ 8 8A	SYS. DET. S1	SYS. DET. S2	FS	DC ISOLATOR	ST	DC ISOLATOR
FILE "J"	NOT USED	∅ 2 2B	NOT USED	NOT USED	∅ 6 6B	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED

EX.: 1A, 2A, ETC. = LOOP NO.'S
 FS = FLASH SENSE
 ST = STOP TIME
 ⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

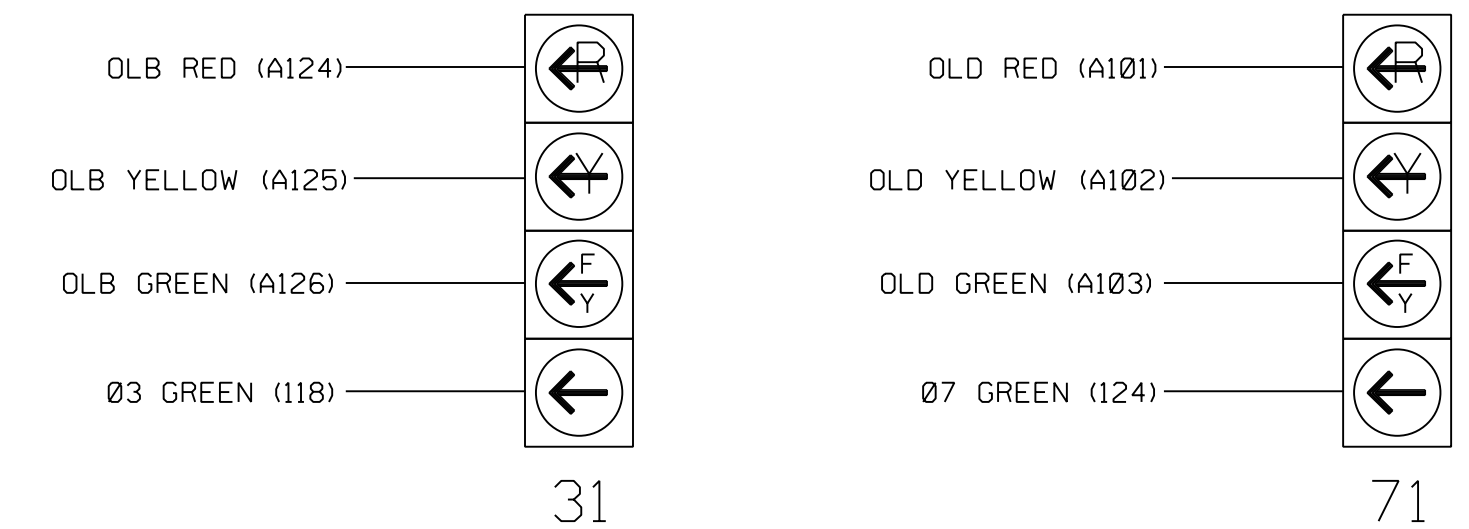
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND TIME	DELAY TIME	ADDED INITIAL	DETECTOR TYPE
1A	TB2-1,2	I1U	56	1	1	YES				N
2A	TB2-5,6	I2U	39	2	2	YES			X	N
2B	TB2-7,8	I2L	43	12	2	YES			X	N
3A ¹	TB4-5,6	I5U	58	3	3	YES		15		N
	-	J8U	50	28	8	YES				N
4A	TB4-9,10	I6U	41	4	4	YES				N
5A	TB3-1,2	J1U	55	5	5	YES				N
6A	TB3-5,6	J2U	40	6	6	YES			X	N
6B	TB3-7,8	J2L	44	16	6	YES			X	N
7A ²	TB5-5,6	J5U	57	7	7	YES		15		N
	-	I8U	49	24	4	YES		3		N
8A	TB5-9,10	J6U	42	8	8	YES				N
* S1	TB6-9,10	I9U	60	11	SYS	NO				N
* S2	TB6-11,12	I9L	62	13	SYS	NO				N

- * System detector only. Remove any assigned vehicle phase.
- ¹Add jumper from I5-W to J8-W, on rear of input file.
- ²Add jumper from J5-W to I8-W, on rear of input file.
- * 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.



FYA SIGNAL WIRING DETAIL

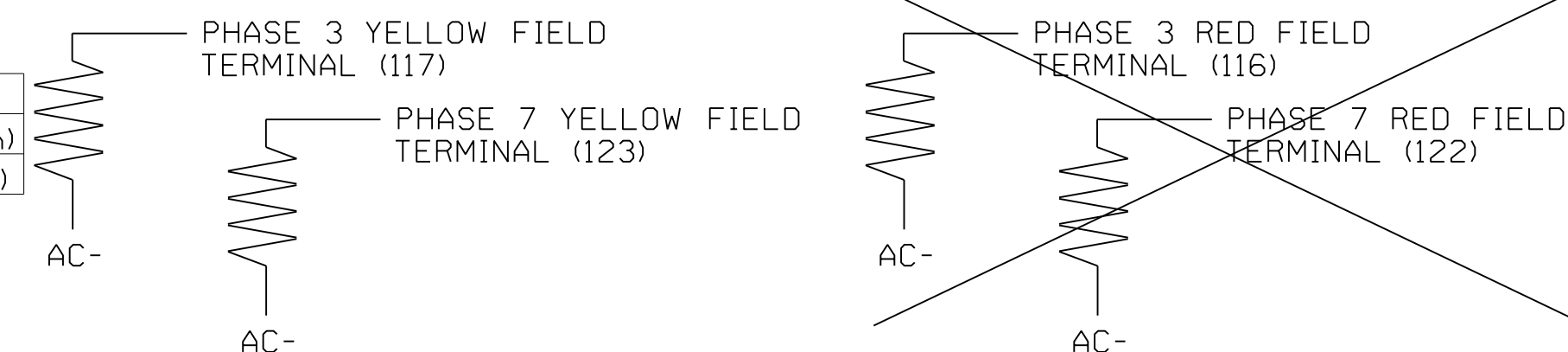
(wire signal head as shown)



LOAD RESISTOR INSTALLATION DETAIL

ACCEPTABLE VALUES

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



NOTE: IF PRESENT, REMOVE LOAD RESISTOR FROM PHASE 3 RED FIELD TERMINAL 116 AND PHASE 7 RED FIELD TERMINAL 122.

Signal Upgrade - Final Design
 Electrical Detail - Sheet 1 of 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 68 (Eastchester Dr.)
 at
 SR 1556 (Gallimore Dairy Rd.)

Division 7 Guilford County High Point
 PLAN DATE: August 2024 REVIEWED BY: DT Sears
 PREPARED BY: WP Erickson-Jones REVIEWED BY:

REVISIONS: INIT. DATE

8/22/2024

Porter Jones
 PROFESSIONAL ENGINEER
 SEAL 056142
 SIGNATURE DATE

SIG. INVENTORY NO. 07-1438

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