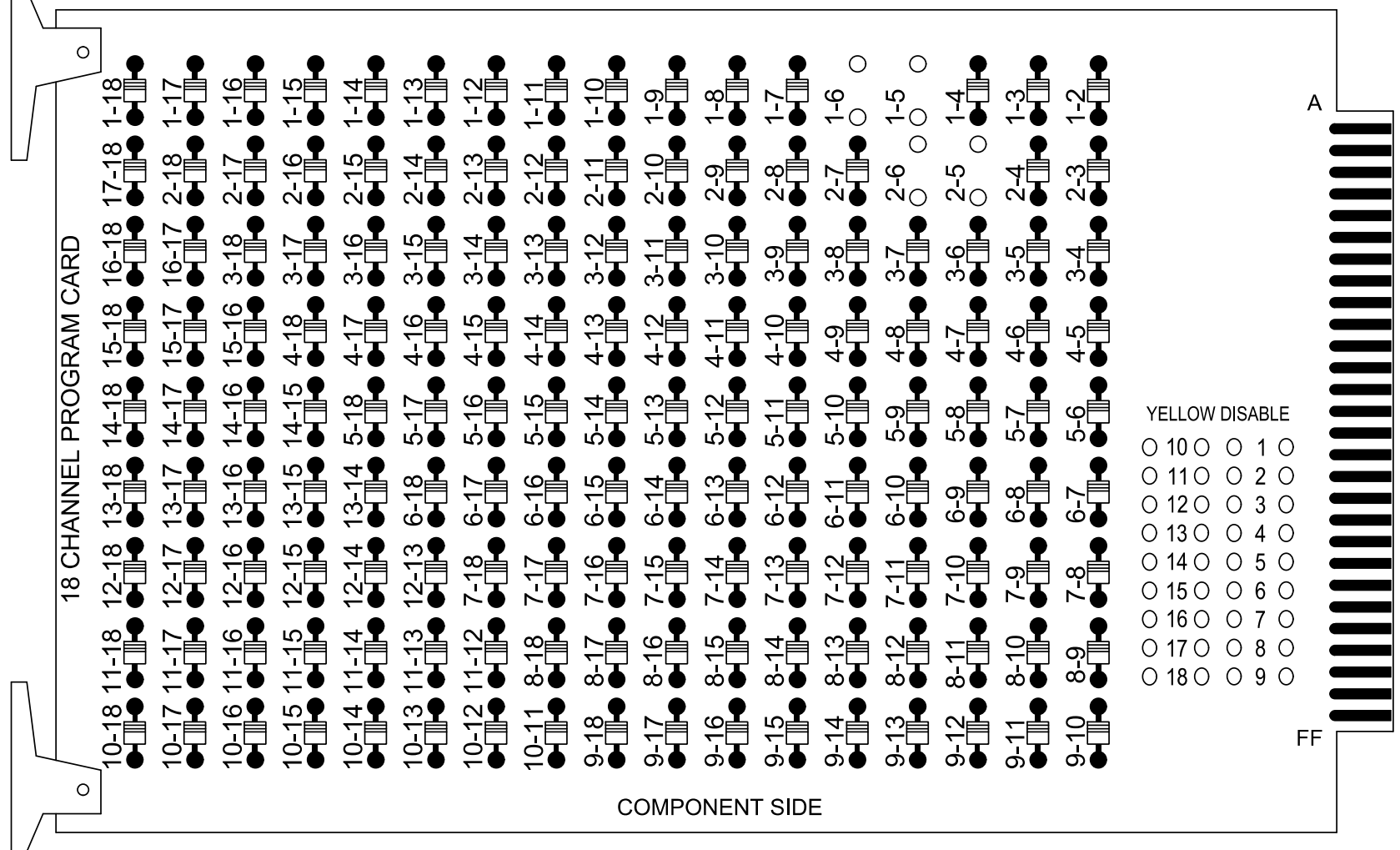


18 CHANNEL IP CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

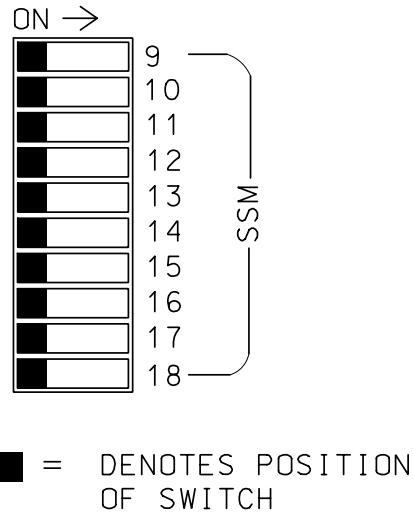
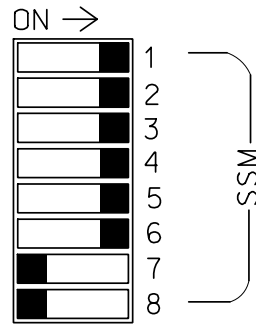
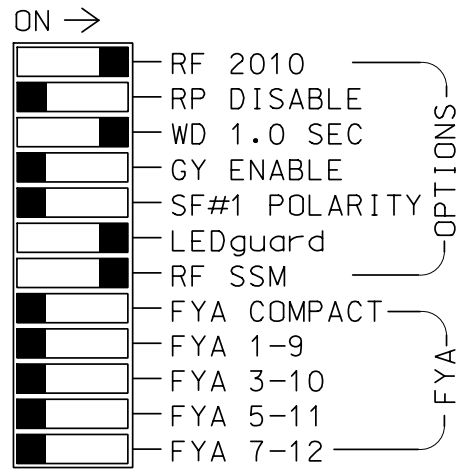
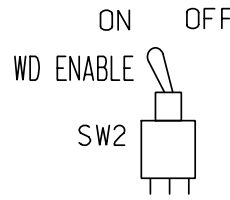
REMOVE DIODE JUMPERS 1-5, 1-6, 2-5, and 2-6



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.



NOTES

- 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.
- Program controller to start up in phase 2 Green No Walk and phase 6 Green No Walk.
- The cabinet and controller are part of the Concord Central 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
PHASES USED.....1,2,3,4,5,6
OVERLAP "1".....NOT USED
OVERLAP "2".....NOT USED
OVERLAP "3".....NOT USED
OVERLAP "4".....NOT USED

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	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11	21,22	NU	31	32	41	42,43,44	62	NU	51	61,62	NU	NU	NU	NU	NU	NU	NU
RED		128		116	116	101	101			134								
YELLOW		129		117	117	102	102			135								
GREEN		130		118	118	103	103			136								
RED ARROW	125								131									
YELLOW ARROW	126						102		132									
FLASHING YELLOW ARROW																		
GREEN ARROW	127			118	103	103	133											

NU = Not Used

MAXTIME STARTUP AND SOFTWARE FLASH
PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters

StartUp Clearance Hold
6

Unit Flash Parameters

All Red Flash Exit Time
6

INPUT FILE POSITION LAYOUT

(front view)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	FS DC ISOLATOR ST DC ISOLATOR
FILE "J"	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y	S - O - I - T - E M P T Y

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

FS = FLASH SENSE
ST = STOP TIME

SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channel Configuration
Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE: FLASH RED

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 10-0875T1
DESIGNED: February 2025
SEALED: 08-21-2025
REVISED: N/A

PLANS PREPARED IN THE OFFICE OF:
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Electrical Detail - Temporary Design 1

ELECTRICAL AND PROGRAMMING DETAILS FOR:		US 29 (Concord Parkway South)		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared for the Offices of:		at		SEAL	
750 N.Greenfield Pkwy, Garner, NC 27529		SR 1414 (Rock Hill Church Road) and Honda Cars of Concord		NORTH CAROLINA PROFESSIONAL SEAL 044434 ENGINEER KEVIN P. BAUMANN	
Division 10 Cabarrus County Concord		PLAN DATE: February 2025 REVIEWED BY: KP Baumann		DocuSigned by SDC708A8BC8447 8/21/2025 DATE	
PREPARED BY: SP Pennington REVIEWED BY:		REVISIONS		INIT. DATE	
				SIG. INVENTORY NO. 10-0875T1	