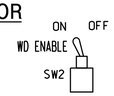
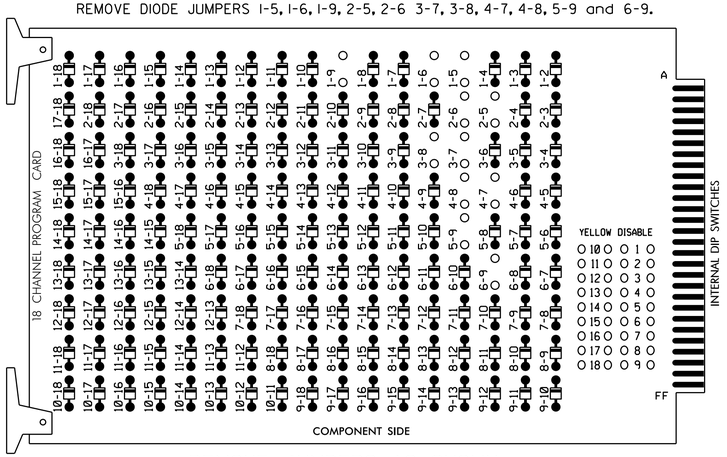
PROJECT REFERENCE NO.	SHEET NO.
B-4565	Sig. 5.1

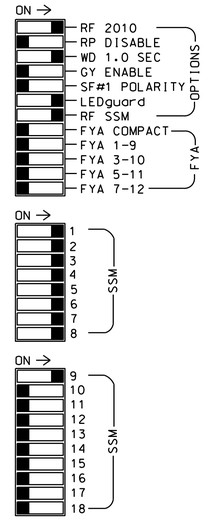
EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



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





■ = DENOTES POSITION OF SWITCH

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 Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

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 Plans.
2. Enable Simultaneous Gap-Out for all phases.
3. Program phases 2 and 6 for Variable Initial and Gap Reduction.
4. Program phases 2 and 6 for Start Up In Green.
5. Program phases 2 and 6 for Yellow Flash.
6. The cabinet and controller are part of the Kinston Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070L
CABINET.....332 W/ AUX
SOFTWARE.....ECONOLITE OASIS
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 (12-STD; 6-AUX)
LOAD SWITCHES USED.....S1,S2,S4,S5,S7,S8
S10,S11,AUX S1
PHASES USED.....1,2,3,4,5,6,7,8
OVERLAP "A".....1
OVERLAP "B".....NOT USED
OVERLAP "C".....NOT USED
OVERLAP "D".....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	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21,22 23	NU	31	41,42	NU	51	61,62	NU	71,72	81,82	NU	82	NU	NU	NU	NU	NU
RED		128			101			134			107		*					
YELLOW		129			102			135			108							
GREEN		130			103			136			109							
RED ARROW	125			116			131			122								
YELLOW ARROW	126			117			132			123			A122					
GREEN ARROW	127			118			133			124			A123					

NU = Not Used

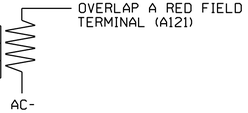
* Denotes install load resistor. See load resistor installation detail this sheet.

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

ACCEPTABLE VALUES

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



NOTE: The purpose of this resistor is to load the channel red monitor input in order for the Signal Sequence Monitor to use the full signal sequence monitoring capability on channels that do not use the red display in the field.

INPUT FILE POSITION LAYOUT

(front view)

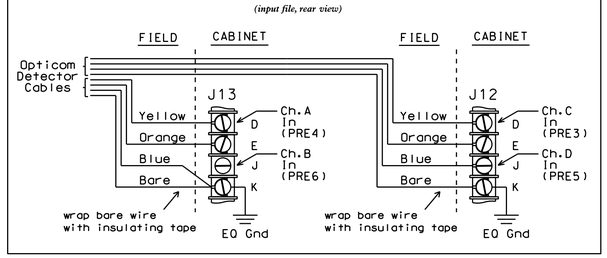
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø 1 1A	Ø 1 1B	Ø 2/SYS 2B/SØ2	SLOT EMPTY	Ø 3 3A	Ø 4 4A	SYS. DET. SØ4	SYS. DET. SØ6	SYS. DET. SØ9	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
	L	NOT USED	Ø 2/SYS 2A/SØ1	Ø 2/SYS 2C/SØ3		NOT USED	Ø 4 4B	SYS. DET. SØ5	NOT USED	SYS. DET. S10					ST DC ISOLATOR
FILE "J"	U	Ø 5 5A	Ø 6/SYS 6A/SØ7	Ø 7 7A	SLOT EMPTY	SLOT EMPTY	Ø 8/SYS 8A/S11	Ø 8 8C	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	PRE3 OPTICOM 4-CHANNEL	PRE4	SLOT EMPTY
	L	NOT USED	Ø 6/SYS 6B/SØ8	Ø 7 7B			Ø 8/SYS 8B/S12	Ø 8 8D					PRE5	PRE6	

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

FS = FLASH SENSE
ST = STOP TIME
PRE = PREEMPT

TYPICAL OPTICOM FIELD WIRE DETAIL

(input file, rear view)



INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB2-1,2	I1U	56	18	1	1	Y	Y			
1B	TB2-5,6	I2U	39	1	2	1	Y	Y			15
2A/SØ1	TB2-7,8	I2L	43	5	12	2/SYS	Y	Y			
2B/SØ2	TB2-9,10	I3U	63	25	32	2/SYS	Y	Y			
2C/SØ3	TB2-11,12	I3L	76	38	42	2/SYS	Y	Y			
3A	TB4-5,6	I5U	58	20	3	3	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			10
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			
6A/SØ7	TB3-5,6	J2U	40	2	6	6/SYS	Y	Y			
6B/SØ8	TB3-7,8	J2L	44	6	16	6/SYS	Y	Y			
7A	TB3-9,10	J3U	64	26	36	7	Y	Y			
7B	TB3-11,12	J3L	77	39	46	7	Y	Y			
8A/S11	TB5-9,10	J6U	42	4	8	8/SYS		Y		2.1	
8B/S12	TB5-11,12	J6L	46	8	18	8/SYS		Y		2.1	
8C	TB7-1,2	J7U	66	28	38	8	Y	Y			
8D	TB7-3,4	J7L	79	41	48	8	Y	Y			
*SØ4	TB6-1,2	I7U	65	27	34	SYS					
*SØ5	TB6-3,4	I7L	78	40	44	SYS					
*SØ6	TB6-5,6	I8U	49	11	24	SYS					
*SØ9	TB6-9,10	I9U	60	22	11	SYS					
*S10	TB6-11,12	I9L	62	24	13	SYS					

* System detector only. Remove the vehicle phase assigned to this detector in the default programming.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

THIS ELECTRICAL DETAIL IS FOR
INTERSECTION: 02-0100
DESIGNED: August 2014
SEALED: 8/26/14
REVISED: N/A

Electrical Detail - Sheet 1 of 2 - Final

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 70-258/US 70 NC 58
at
US 70B-258B NC 58/US 258

Division 2 Lenoir County Kinston

PLAN DATE:	August 2014	REVIEWED BY:	T. Joyce
PREPARED BY:	B. Simmons	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 022013 ENGINEER GEORGE C. BROWN

DocuSigned by: George C. Brown 8/28/2014
F12601ED0BEB434...
DATE

SIG. INVENTORY NO. 02-0100

28-AUG-2014 07:14
S:*TISSAS*HTS Signals*Workgroups*Sig Mgmt*Simmons*Working Folder*Electrical Details*Division 02*020100_sm_ele_xxx.dgn
bsimmons