PROJECT REFERENCE NO.	SHEET NO.
C-4923	Sig. 2.2

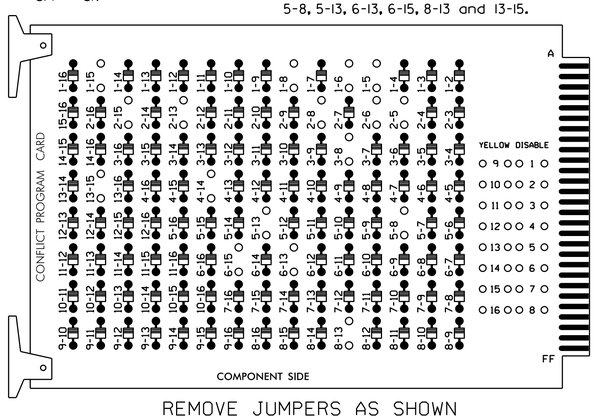
EDI MODEL 2010ECL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

WD ENABLE

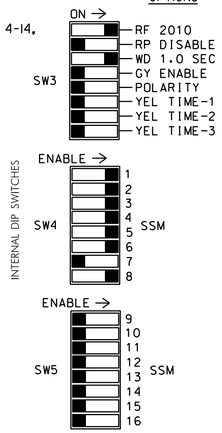
SW2 — OFF ON

REMOVE DIODE JUMPERS 1-5, 1-6, 1-8, 1-15, 2-5, 2-6, 2-8, 2-13, 2-15, 3-8, 4-14, 5-8, 5-13, 6-13, 6-15, 8-13 and 13-15.



REMOVE JUMPERS AS SHOWN

OPTIONS



■ = DENOTES POSITION OF SWITCH

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 SEL1-SEL5 are present on the monitor board.

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

SIGNAL DRIVER OUTPUT PROGRAMMING DETAIL FOR OVERLAP A

From Main Menu press 4 (Unit Data)

```
SE-PAC UNIT DATA                PRESS # DESIRED

1- STARTUP & MISC          6- ALT SEQUENCES
2- REMOTE FLASH            7- PORT 1 DATA
3- OVERLAP STANDARD        8- I/O MISC
4- OVERLAP SPECIAL         9- SIG DRV OUT
5- RING STRUCTURE          A- 224E STATUS
                             F- PRIOR MENU
```

```
SE-PAC SIGNAL DRIVER OUTPUTS
 SIG DRV GRP CHN   HDWE OUTPUT PIN..  SET
 Ph 1 Vehicle..1   Ph 1 Red/Yel/Grn...  1
 Ph 2 Vehicle..2   Ph 2 Red/Yel/Grn...  2
                   .
        Scroll Down to OLA
                 ↓
 OL A Vehicle.13  OL A Red/Yel/Grn... 17   ← Default Value
A-UP B-DN C-LT D-RT E-ENTER F-PRIOR MENU
```

For "OL A Vehicle" change "HDWE OUTPUT PIN SET"
FROM: 17
TO: 8

This will reassign loadswitch S8 to OL A Vehicle

Display will now echo
HDWE OUTPUT PIN SET "Ph 8"

```
 OL A Vehicle.13  Ph 8 Red/Yel/Grn... 8   ← Modified Value
A-UP B-DN C-LT D-RT E-ENTER F-PRIOR MENU
```

Press "F" to return to Unit Data

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. 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 7,9, 10,11,12,13,14,15 & 16 to load switch AC+ per the cabinet manufacturer's instructions.
3. Program controller to start up in phases 2 and 6 green.
4. Enable simultaneous gap-out feature, on controller unit, for all phases.
5. The cabinet and controller are part of the Raleigh City Signal System.

EQUIPMENT INFORMATION

```
CONTROLLER.............CONTRACTOR SUPPLIED 2070L
CABINET................EXISTING 332
SOFTWARE...............SE-PAC2070
CABINET MOUNT..........BASE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED......S1,S2,S2P,S3,S4,S4P,S5,S6,S6P,S8,
PHASES USED............1,2,3,4,5,6,2 PED,4 PED,6 PED
OVERLAP A..............3+5
OVERLAP B..............NOT USED
OVERLAP C..............NOT USED
OVERLAP D..............NOT USED
```

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	DETECTOR NO.	NEMA PHASE	DELAY TIME	EXTEND (STRETCH) TIME
1A	TB2-9,10	I3U	63	5	1		
2A,2B,2C	TB2-5,6	I2U	39	3	2		1.6
2D,2E,2F	TB2-7,8	I2L	43	4	2		
3A	TB2-11,12	I3L	76	6	3	3	
3B	TB4-5,6	I5U	58	9	3		
3C	TB4-7,8	I5L	58	9	3		
4A	TB4-9,10	I6U	41	11	4	3	
4B	TB4-11,12	I6L	45	12	4	10	
5A	TB3-1,2	J1U	55	19	5		1.0
5B	TB3-3,4	J1L	55	19	5		1.0
5C	TB3-5,6	J2U	40	21	5	10	
5D	TB3-7,8	J2L	44	22	5	15	
6A,6B	TB3-9,10	J3U	64	23	6		1.6
6C,6D	TB3-11,12	J3L	77	24	6		1.6
6E,6F	TB5-1,2	J4U	48	25	6		
6G,6H	TB5-3,4	J4L	48	25	6		
PED PUSH BUTTONS							
P21,P22	TB8-4,6	I12U	67	PED 2	2 PED		
P41,P42	TB8-5,6	I12L	69	PED 4	4 PED		
P61,P62	TB8-7,9	I13U	68	PED 6	6 PED		

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT	Ø2 2A, 2B,2C	Ø1 1A	SLOT	Ø3 3B	Ø4 4A	SLOT	SLOT	SLOT	SLOT	SLOT	Ø2 PED DC ISOLATOR	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L	EMPTY	Ø2 2D, 2E,2F	Ø3 3A	EMPTY	Ø3 3C	Ø4 4B	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	Ø4 PED DC ISOLATOR	NOT USED	ST DC ISOLATOR
FILE "J"	U	Ø5 5A	Ø5 5C	Ø6 6A,6B	Ø6 6E,6F	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT
	L	Ø5 5B	Ø5 5D	Ø6 6C,6D	Ø6 6G,6H	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY

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

FS = FLASH SENSE
ST = STOP TIME

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3			S4		S4P	S5	S6	S6P	S7	S8*	S8P
PHASE	1	2	2 PED	3			4		4 PED	5	6	6 PED	7	OLA	8 PED
SIGNAL HEAD NO.	11	21,22 23	P21, P22	31	32	33	41	42	P41, P42	51,52	61,62 63,64	P61, P62	NU	34,35	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			116						131				107	
YELLOW ARROW	126			117						132				108	
GREEN ARROW	127			118	118		103			133				109	
✋			113						104			119			
🚶			115						106			121			

NU = Not Used
* Load Switch S8 shall be assigned as overlap A.

SE-PAC2070 CONTROLLER OVERLAP PROGRAMMING

(program controller as shown below)

FROM MAIN MENU PRESS 4 (UNIT DATA)

```
SE-PAC UNIT DATA                PRESS # DESIRED

1- STARTUP & MISC          6- ALT SEQUENCES
2- REMOTE FLASH            7- PORT 1 DATA
3- OVERLAP STANDARD        8- I/O MISC
4- OVERLAP SPECIAL         9- SIG DRV OUT
5- RING STRUCTURE
                             F- PRIOR MENU
```

```
SE-PAC OVERLAP - A          (0-NO / 1-YES)

 OVL PHASES:  001010000 0000000
    PHS/CHN:  123456789 0123456789 01234
 OVL CHN(S):  000000000 0001000000 00000

A-UP  B-DN  D-DspChn  E-EDIT  F-PRIOR MENU
```

PRESS "F" TO RETURN TO UNIT DATA

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-1296
DESIGNED: September 2014
SEALED: 12-09-14
REVISED: N/A

REVISION SEAL

NORTH CAROLINA PROFESSIONAL SEAL 008453 ENGINEER JOHN T. ROWE, JR.

DocuSigned by: John T. Rowe, Jr. 12/12/2014
641B6DA4E1B8RE DATE

Signal Upgrade

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:
Traffic Engineering and Safety System Branch
Signal Management Section
750 Greenfield Pkwy, Garner, NC 27529

US 64 Business (New Bern Avenue) at Corporation Parkway

Division 5 | Wake County | Raleigh

PLAN DATE: November 2007	REVIEWED BY: T. Joyce		
PREPARED BY: C. Strickland	REVIEWED BY:		

REVISIONS	INIT.	DATE
Added pedestrian signals and head 64.(JP)	JTR	12/12/2014

SEAL

Not a certified document as to the Original Document but Only as to the Revisions - This document originally issued and sealed by George C. Brown, PE #022013, on 01/04/08.
This document is only certified as to the revisions.

SIGNATURE DATE

SIG. INVENTORY NO. 05-1296

12-DEC-2014 07:39
S:*TISS&SU*TIS Signals*Workgroups*Sig Mon*Petersons*051296_sm_ele_20080104.dgn
jtpeterson