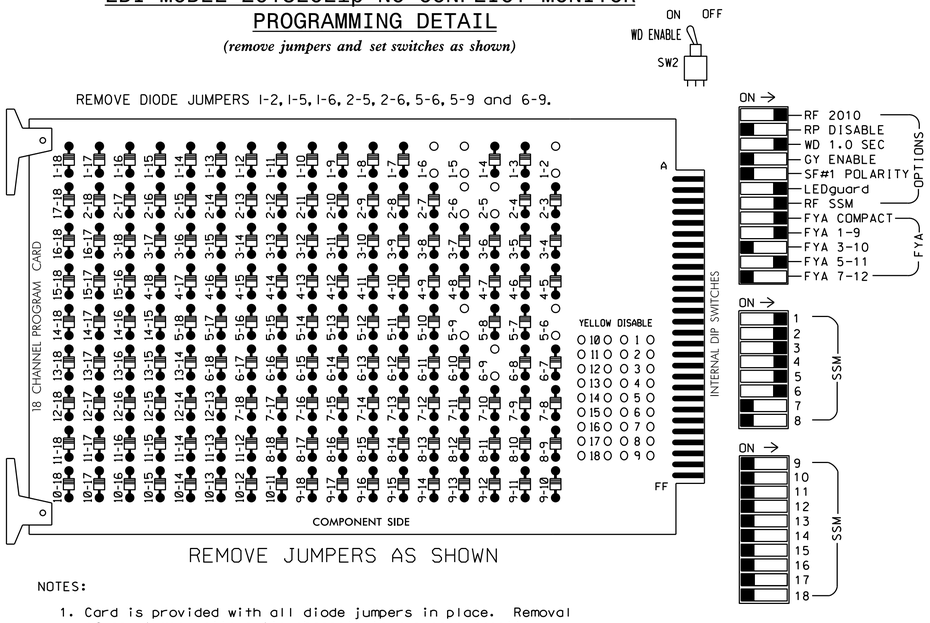
PROJECT REFERENCE NO.	SHEET NO.
U-4715B	Sig. 21.1

EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



■ = 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. 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. Integrate monitor with Ethernet network in cabinet.
5. ! Special cabinet wiring is required to utilize FYA COMPACT mode. See Ped Yellow Conflict Monitor Wiring Detail on this sheet. !

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 and overlap 1 as Wag Overlaps.
6. The cabinet and controller are part of the Asheville Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....336
SOFTWARE.....ECONOLITE OASIS
CABINET MOUNT.....POLE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S7,S8
PHASES USED.....1,2,3,4,6
OVERLAP "A".....1+2
OVERLAP "B".....NOT USED
OVERLAP "C".....6
OVERLAP "D".....NOT USED

SIGNAL HEAD HOOK-UP CHART

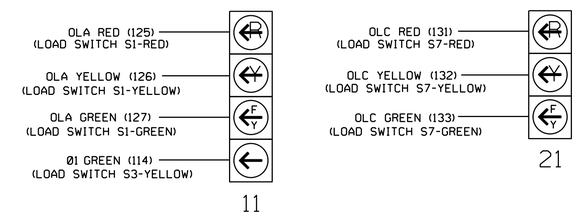
LOAD SWITCH NO.	S1	S2	S3		S4		S5		S6	S7	S8	S9	S10	S11	S12
CMU CHANNEL NO.	1	2	9	13	3		4		14	5	6	15	7	8	16
PHASE	OLA	2	1 GRN	2 PED	3		4		4 PED	OLC	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	★ 11	22,23	★ 11	NU	31	32	41	42	NU	★ 21	61,62	NU	NU	NU	NU
RED		128			116	116	101	101			134				
YELLOW		129			117	117	102	102			135				
GREEN		130			118	118	103	103			136				
RED ARROW	125									131					
YELLOW ARROW	126									132					
FLASHING YELLOW ARROW	127									133					
✋															
GREEN ARROW			114		118		103								
🚶				*											

* Denotes install load resistor. See load resistor installation detail below.
★ See pictorial of head wiring in detail below.

NOTE: Load Switches S1,S3,S7 require output remapping. See Sheets 3 and 4 of this electrical detail for instructions.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

1. The sequence display for signal head 11 requires special logic programming. See sheet 2 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	Ø1,6 1A	Ø2/SYS 2A/S1	Ø 3 3A	Ø 4 4A	SLOT EMPTY	Ø6/SYS 6A/S3	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
L	NOT USED	Ø2/SYS 2B/S2	NOT USED	NOT USED		Ø6/SYS 6B/S4								ST DC ISOLATOR

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

FS = FLASH SENSE
ST = STOP TIME

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[1]	TB21-1,2	I1U	56	18	1	1	Y	Y			15
	-	-	59	21	15	6	Y	Y	Y		3
2A/S1	TB21-3,4	I2U	39	1	2	2/SYS	Y	Y			
2B/S2	TB23-3,4	I2L	43	5	12	2/SYS	Y	Y			
3A	TB21-5,6	I3U	58	20	3	3	Y	Y			
4A	TB21-7,8	I4U	41	3	4	4	Y	Y			5
6A/S3	TB21-11,12	I6U	40	2	6	6/SYS	Y	Y			
6B/S4	TB23-11,12	I6L	44	6	16	6/SYS	Y	Y			

[1] Add jumper from I1-F to I1-SP on rear of input file.

INPUT FILE POSITION LEGEND: I2L
FILE I
SLOT 2
LOWER

PED YELLOW CONFLICT MONITOR WIRING DETAIL

(make cabinet wiring changes as shown below)

In order to use FYA COMPACT mode on the 2018ECLip-NC Monitor, the cabinet must be wired such that the (unused) Ped Yellow load switch outputs are wired to the conflict monitor as follows: From 2 PY (field term. 114) to chan. 9 green (monitor pin 13).

Follow the instructions below to make the appropriate connections:

STEP 1: Fold down rear panel of output file.

STEP 2: Find unused wiring harness from conflict monitor card edge connector (which should be tied and bundled together).

STEP 3: Find the conductors that correspond to the following conflict monitor card edge pins and solder wire to the appropriate terminal on the rear of the output file as shown below:

CMU-13 ———————————— 2PY (term. 114)

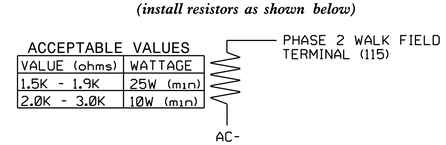
NOTE: Some cabinet manufacturers use a keyed plug to accomplish this wiring configuration. If connectors are used, simply plug the two connectors together that are labeled with the pin-out as shown above.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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: 13-0149
DESIGNED: December 2015
SEALED: 8-05-16
REVISED: N/A

ELECTRICAL DETAIL SHEET 1 OF 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

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

US 70 (Tunnel Road)
at
SR 2838 (Porters Cove Road) / Citgo Entrance

Division 13 Buncombe County Asheville

PLAN DATE: May 2016	REVIEWED BY: DTJ
PREPARED BY: James Peterson	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 036880 ENGINEER KEITH M. MINS

DocuSigned by: Keith M. Mins 9/1/2016
ZF807D9C0A7A3RE SIGNATURE DATE

SIG. INVENTORY NO. 13-0149

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