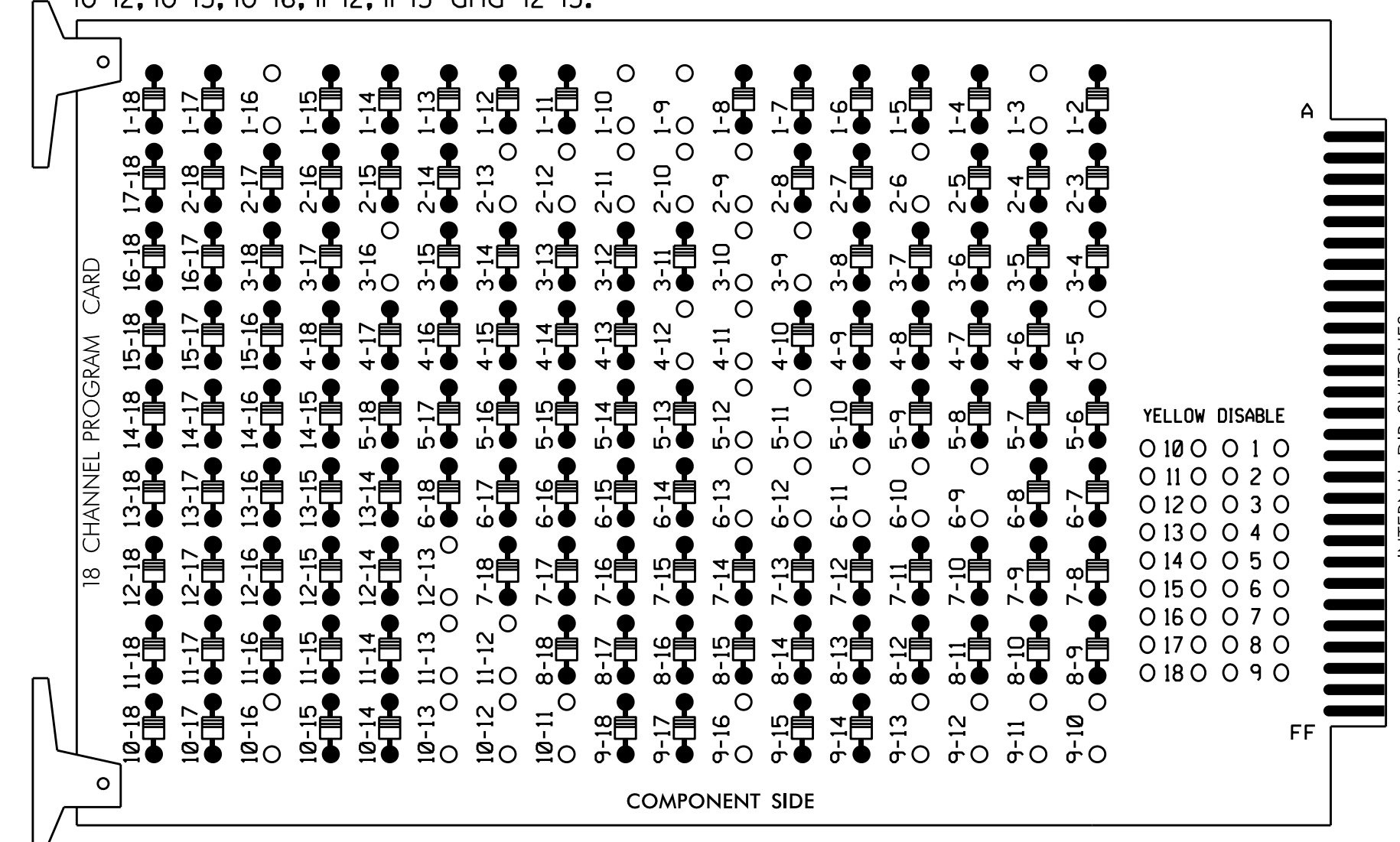


EDI MODEL 2018EClip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

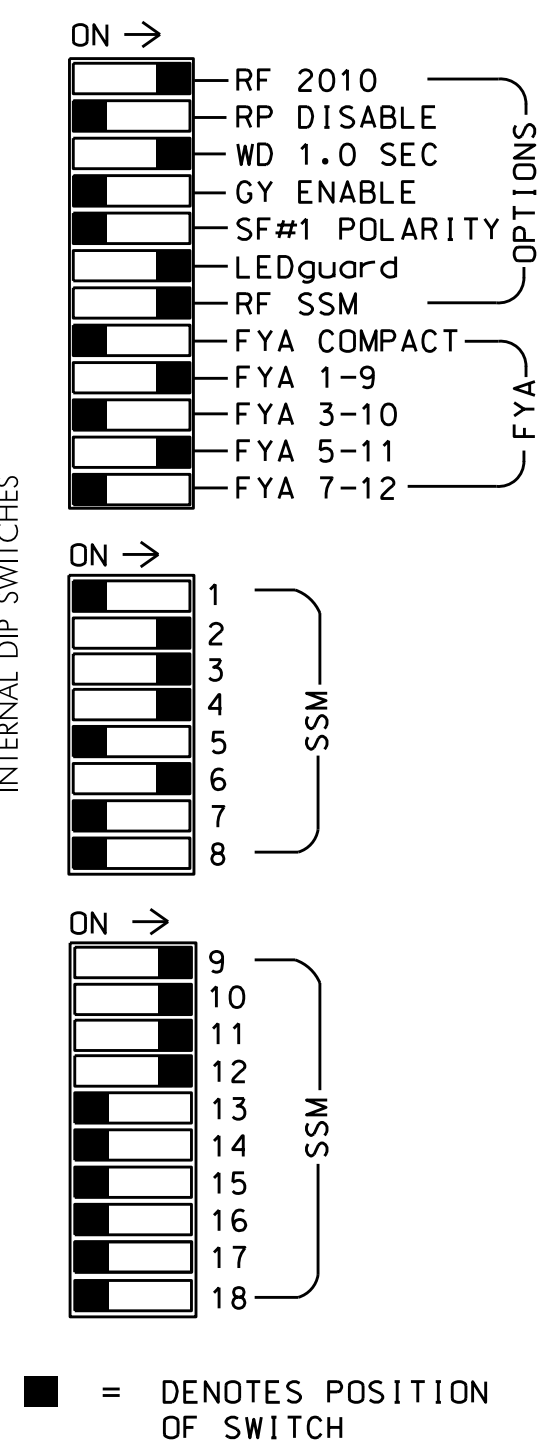
REMOVE DIODE JUMPERS 1-3, 1-9, 1-10, 1-16, 2-6, 2-9, 2-10, 2-11, 2-12, 2-13, 3-9, 3-10, 3-16, 4-5, 4-11, 4-12, 5-11, 5-12, 6-9, 6-10, 6-11, 6-12, 6-13, 9-10, 9-11, 9-12, 9-13, 9-16, 10-11, 10-12, 10-13, 10-16, 11-12, 11-13 and 12-13.



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 unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Enable Simultaneous Gap-Out for all phases.
- Program phases 2 and 6 for Start Up In Green.
- Program phases 2 and 3 for 'STARTUP PED CALL'.
- Program phases 2 and 6 for Yellow Flash, and overlaps 1 and 2 as Wag Overlaps.
- The cabinet and controller are part of the Asheville Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
 CABINET.....332 W/ AUX
 SOFTWARE.....ECONOLITE OASIS
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
 LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S7,S8,S12,AUX S1,
 AUX S2,AUX S4,AUX S5
 PHASES USED.....2,2 PED,3,3 PED,4,6
 OVERLAP "A".....2+3
 OVERLAP "B".....3+6
 OVERLAP "C".....4+6
 OVERLAP "D".....2+4
 OVERLAP "E".....NOT USED
 OVERLAP "F".....NOT USED
 OVERLAP "G".....3
 OVERLAP "H".....4

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	OLG	2	2 PED	3	4	4 PED	OLH	6	6 PED	7	8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	23,24	P21, P22	31,32, 33,34	41,42	NU	51	63,64	NU	NU	NU	P31, P32	11	61,62	NU	51	21,22	NU
RED		128		116	101			134						A124			A101	
YELLOW	*	129		117	102		*	135						A125			A102	
GREEN		130		118	103			136						A126			A103	
RED ARROW														A121			A114	
YELLOW ARROW														A122			A115	
FLASHING YELLOW ARROW														A123			A116	
GREEN ARROW	127						133											
Hand				113														
Person													110					
																		112

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

INPUT FILE POSITION LAYOUT

(front view)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅2/SYS	∅2	∅2	ZONE 2C	∅3	∅4	∅3	∅4	SYS. DET. S5	∅2 PED	NOT USED	FS	DC ISOLATOR	DC ISOLATOR
L	2A/S1	2D	2D	2D	3A	4A	3A	4A	3A	4A	3A	4A	3A	4A
U	∅2/SYS	NOT USED	NOT USED	NOT USED	∅3	∅4	∅3	∅4	NOT USED	∅3 PED	ST	DC ISOLATOR	DC ISOLATOR	DC ISOLATOR
L	2B/S2				3B	4B	3B	4B	3B	4B	3B	4B	3B	4B
U	∅6/SYS	∅6	∅6	ZONE 6C	∅3	∅4	∅3	∅4	∅3	∅4	∅3	∅4	∅3	∅4
L	6A/S3	6D	6D	6D	3A	4A	3A	4A	3A	4A	3A	4A	3A	4A
U	∅6/SYS	NOT USED	NOT USED	NOT USED	∅3	∅4	∅3	∅4	NOT USED	∅3 PED	ST	DC ISOLATOR	DC ISOLATOR	DC ISOLATOR
L	6B/S4				3B	4B	3B	4B	3B	4B	3B	4B	3B	4B

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

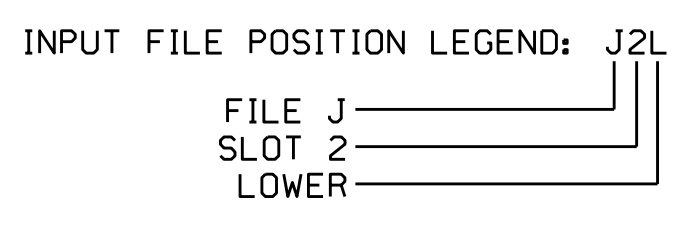
INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
2A/S1	TB2-5,6	I2U	39	1	2	2/SYS	Y	Y			
2B/S2	TB2-7,8	I2L	43	5	12	2/SYS	Y	Y			
2C	★	I4U	47	9	22	2	Y	Y			
2D ¹	-	I8U	49	11	24	4	Y	Y			15
3A	TB4-9,10	I3U	63	25	32	2	Y	Y			3
3B	TB4-11,12	I6L	45	7	14	3	Y	Y			10
4A	TB6-1,2	I7U	65	27	34	4	Y	Y			
4B	TB6-3,4	I7L	78	40	44	4	Y	Y			15
6A/S3	TB3-5,6	J2U	40	2	6	6/SYS	Y	Y			
6B/S4	TB3-7,8	J2L	44	6	16	6/SYS	Y	Y			
6C	★	J4U	48	10	26	6	Y	Y			
6D ²	-	I5U	58	20	3	3	Y	Y			15
* S5	TB6-9,10	J3U	64	26	36	6	Y	Y			3
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2 PED					
P31,P32	TB8-8,9	I13L	70	32	PED 8	3 PED					

NOTE:
 INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.
¹Add jumper from I3-F to I8-F, on rear of input file.
²Add jumper from I5-F to J3-F, on rear of input file.
 * System detector only. Remove the vehicle phase assigned to this detector in the default programming.

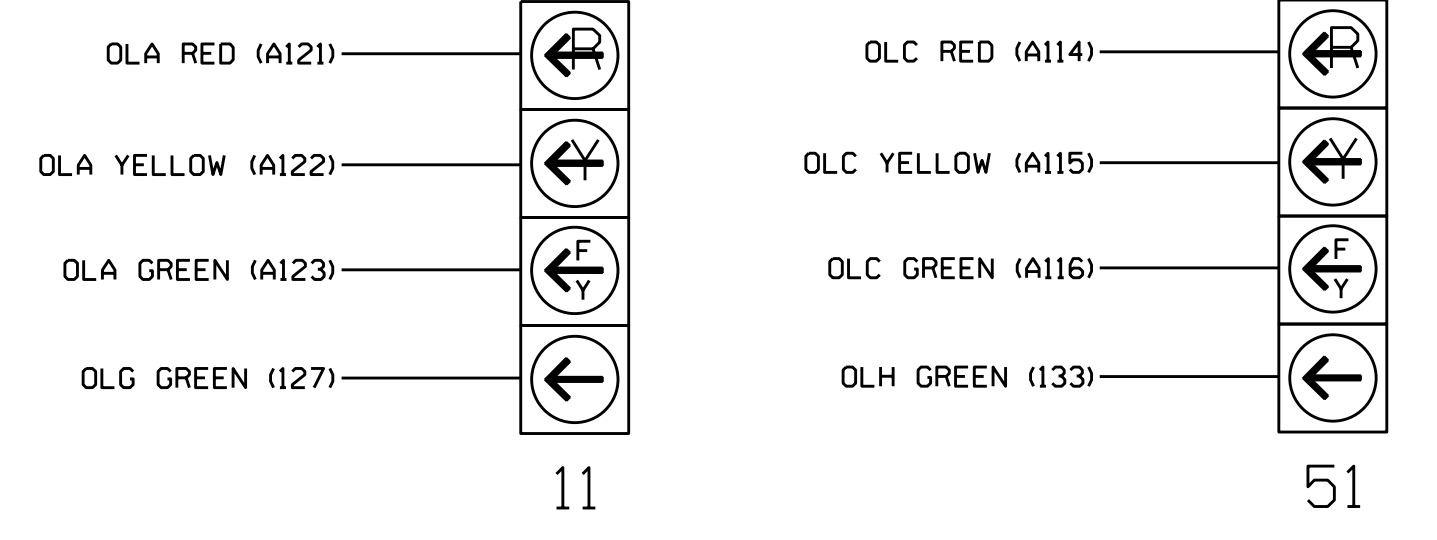
★ SPECIAL DETECTOR NOTE

For Zone 2C and Zone 6C install a microwave 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 Plan.



4 SECTION FYA PPLT SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

1. The sequence display for these signals require special logic programming. See sheet 2 for programming instructions.

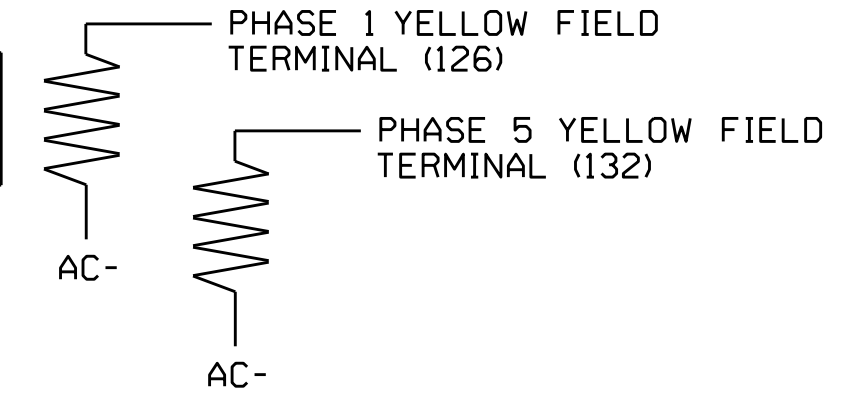
COUNTDOWN PEDESTRIAN SIGNAL OPERATION

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.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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



Electrical Detail - Sheet 1 of 5

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:
 TRANSPORTATION MOBILITY AND SAFETY DIVISION
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Signal Management Section
 750 N. Greenfield Pkwy, Garner, NC 27529

US 19-23 Business/SR 3548 (Haywood Road) at I-240 Ramps/Hanover Street

Division 13 Buncombe County Asheville
 PLAN DATE: July 2016 REVIEWED BY: BAS
 PREPARED BY: C. Strickland REVIEWED BY:

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 030530
 JACUARY M. LITTLE

DocuSigned by:
 Zachary M. Little
 8/30/2016
 021EFD8F5341F DATE

SIG. INVENTORY NO. 13-0218