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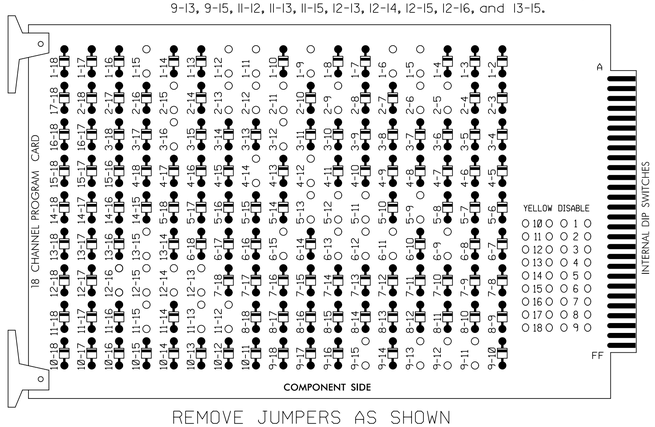
PROJECT REFERENCE NO.	SHEET NO.
SM-6114C	Sig. 1.1

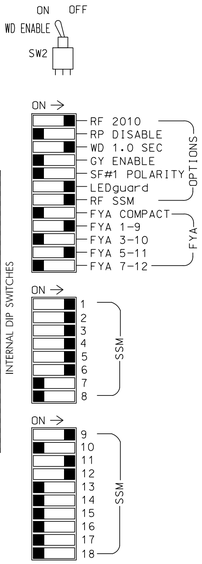
EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS I-5, I-6, I-9, I-11, I-12, I-15, 2-5, 2-6, 2-9, 2-11, 2-12, 2-13, 2-15, 3-12, 3-16, 4-12, 4-14, 5-9, 5-11, 5-12, 5-13, 6-9, 6-11, 6-12, 6-13, 6-15, 9-11, 9-12, 9-13, 9-15, 11-12, 11-13, 11-15, 12-13, 12-14, 12-15, 12-16, and 13-15.



REMOVE JUMPERS 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.

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 7,8,10, 13,14,15 & 16 to load switch AC+ per the cabinet manufacturer's instructions.
3. Program controller to start up in phase 2 Walk and 6 Walk.
4. If this signal will be managed by an ATMS software, enable controller and detector logging for all enabled detectors.
5. The cabinet and controller are part of the Signal System D14-06_Hendersonville.

EQUIPMENT INFORMATION

CONTROLLER.....2070LX
CABINET.....332 W/ AUX
SOFTWARE.....ECONOLITE ASC/3-2070
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED.....S1,S2,S2P,S3,S4,S4P,S5,S6,S6P, S7#S8P,S9,S12,S13@
PHASES USED.....1,2,2PED,3,3PED,4,4PED,5,6, 6PED
OVERLAP "A".....*
OVERLAP "B".....NOT USED
OVERLAP "C".....*
OVERLAP "D".....1+2+3+4+5+6
* See overlap programming detail on sheet 2
# Used for firestation pilot lamp
@ Used for flashing signal heads at firestation driveway.

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1		S2	S2P	S3		S4			S4P	S5		S6	S6P	S7	S8	S8P	S9	S10	S11	S12	S13	S14
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	PRE2	8	3 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11★	32	21,22	P21, P22	31	32,33	41	42	62	P41, P42	51★	42	61,62, 63	P61, P62	FIRE PILOT LAMP	NU	P31, P32	11★	NU	NU	51★	F1,F2	NU
RED		*	128		116	116	101	101				*	134									A101	
YELLOW			129		117	117	102	102					135		* 123							A102	
GREEN			130		118	118	103	103					136		*								
RED ARROW																		A121			A114		
YELLOW ARROW		126							102			132						A122			A115		
FLASHING YELLOW ARROW																		A123			A116	A103	
GREEN ARROW	127	127			118		103		103		133	133											
✋				113						104				119			110						
🚶				115						106				121			112						

NU = Not Used

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

★ See pictorial of head wiring in detail this sheet.

NOTE: Load switch S2P-Y is used to drive the firestation pilot lamp. See sheet 2 for wiring and programming details.

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø1 1A	Ø1 1B	Ø3 3A	WIRED INPUT ⊗	SLOT EMPTY	Ø4 4A	SLOT EMPTY	SLOT EMPTY	SYS. DET. S1	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L	NOT USED	Ø2 2A,2B	NOT USED			NOT USED			SYS. DET. S2			Ø4 PED DC ISOLATOR	Ø3 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	Ø5 5A	Ø5 5B	SLOT EMPTY	WIRED INPUT ⊗	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	NOT USED
	L	NOT USED	Ø6 6A,6B												PRE2 AC ISOLATOR

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

FS = FLASH SENSE
ST = STOP TIME
PRE2 = FIRE STATION PREEMPT

⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND TIME	DELAY TIME	ADDED INITIAL	DETECTOR TYPE
1A [1]	TB2-1,2	I1U	56	1★	1	YES		15		N
	-	J4U	48	26★	6	YES		3		N
1B	TB2-5,6	I2U	39	2	1	YES		15		N
2A, 2B	TB2-7,8	I2L	43	12	2	YES				N
3A	TB2-9,10	I3U	63	32	3	YES		3		N
4A	TB4-9,10	I6U	41	4	4	YES		3		N
5A [2]	TB3-1,2	J1U	55	5★	5	YES		15		N
	-	I4U	47	22★	2	YES				N
5B	TB3-5,6	J2U	40	6	5	YES		15		N
6A, 6B	TB3-7,8	J2L	44	16	6	YES				N
* S1	TB6-9,10	I9U	60	11	SYS	NO				N
* S2	TB6-11,12	I9L	62	13	SYS	NO				N
PED PUSH BUTTONS										
P21, P22	TB8-4,6	I12U	67	PED 2	2 PED					
P31, P32	TB8-8,9	I13L	70	PED 8	3 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.

* System detector only. Remove any assigned vehicle phase.

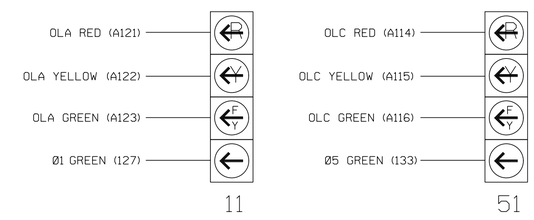
[1] Add jumper from I1-W to J4-W, on rear of input file.
[2] Add jumper from J1-W to I4-W, on rear of input file.

★ See Vehicle Detector Setup programming detail on sheet 3.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)

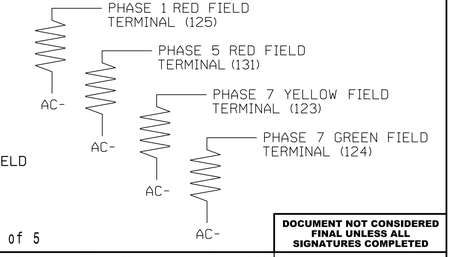


LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

ACCEPTABLE VALUES

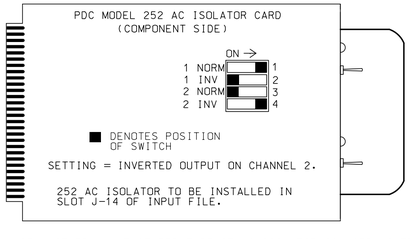
VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



NOTE:
REMOVE PHASE 2 WALK FIELD TERMINAL RESISTOR (115)

PREEMPT 2 AC ISOLATOR (MODEL 252) OUTPUT PROGRAMMING DETAIL

(set DIP switches as shown below)



SETTING = INVERTED OUTPUT ON CHANNEL 2.

252 AC ISOLATOR TO BE INSTALLED IN SLOT J-14 OF INPUT FILE.

NOTE: IF ANOTHER MANUFACTURER TYPE OF AC ISOLATOR IS USED, OUTPUT PROGRAMMING IS LIKELY NOT TO EQUATE TO THAT SHOWN ABOVE.

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.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 14-0609
DESIGNED: February 2022
SEALED: 9/16/2022
REVISED: N/A

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

ELECTRICAL AND PROGRAMMING DETAILS FOR:

US 25 (Asheville Hwy/N Main St)
at
N Church St/N Main St/
Hendersonville High School

Division 14 | Henderson County | Hendersonville

PLAN DATE: February 2022 | REVIEWED BY: D. Darity
PREPARED BY: R.L. Aristondo | REVIEWED BY: J. Carroll

REVISIONS	INIT.	DATE

DocuSigned by: Justin T. Carroll 634DA50AE18486... 9/16/2022
SIGNATURE DATE

SIG. INVENTORY NO. 14-0609

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 030005 ENGINEER JUSTIN T. CARROLL

Electrical Detail - Sheet 1 of 5

750 N.Greenfield Pkwy,Garner,NC 27529

9/15/2022
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