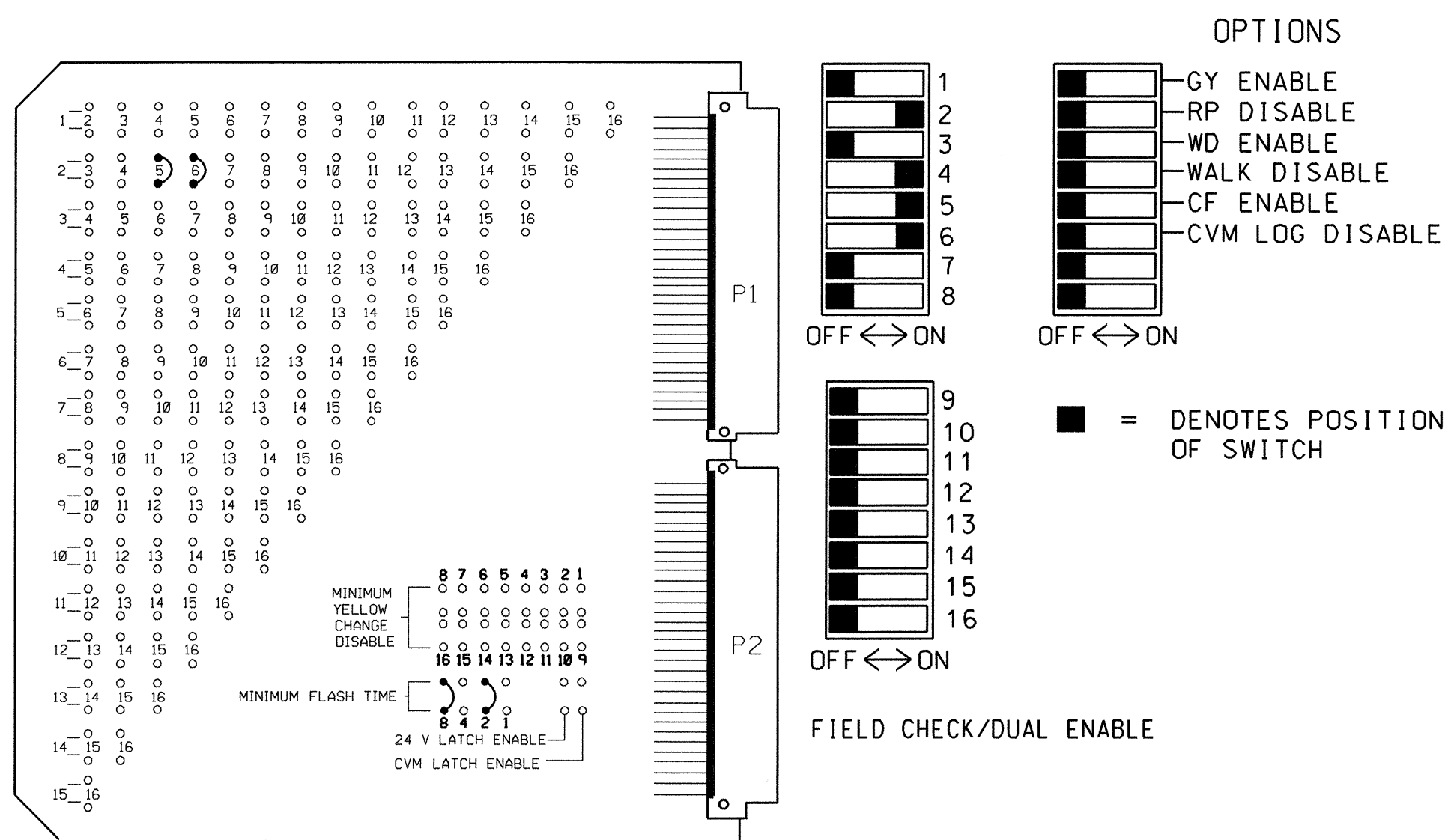


**EDI MODEL MMU-16E
MALFUNCTION MANAGEMENT UNIT
PROGRAMMING DETAIL**

(program card and set switches as shown below)



MMU PROGRAMMING CARD

DETECTOR RACK SET-UP DETAIL

INSERT DETECTOR CARDS IN RACK ACCORDING TO THE DETAIL SHOWN BELOW. PARTICULAR DETECTOR CHANNELS WILL CALL PHASES INDICATED.

BIU	CH1	CH1	CH1	CH1	S L O T	CH1	S L O T	S L O T	POWER SUPPLY AREA
	L3 Ø4	L1 Ø2	L7 Ø5	L5 Ø2		L9 Ø6			
	CH2	CH2	CH2	CH2	E M P T Y	CH2	E M P T Y	E M P T Y	
	L4 NOT USED	L2 Ø2	L8 NOT USED	L6 Ø5		L10 Ø6			

WIRE LOOPS TO TERMINALS ON LOOP PANEL AS SHOWN IN THE CHART BELOW

LOOP NO.	LOOP PANEL TERMINALS
2A,2B	L1A, L1B
2C,2D	L2A, L2B
4A	L3A, L3B
NU	L4A, L4B
5A	L5A, L5B
5A	L6A, L6B
5B	L7A, L7B
NU	L8A, L8B
6A,6B	L9A, L9B
6C,6D	L10A, L10B
---	L11A, L11B
---	L12A, L12B
---	L13A, L13B
---	L14A, L14B
---	L15A, L15B
---	L16A, L16B

ADD JUMPERS FROM: L5A TO L6A, AND L5B TO L6B

NOTE
BE SURE TO PROGRAM DETECTOR TYPES AND TIMERS (EXTEND AND DELAY) AS SHOWN ON THE SIGNAL PLANS.

ASSIGN CONTROLLER SYSTEM DETECTORS TO LOCAL CONT. DET. NUMBERS AS SHOWN IN CHART BELOW

CONTROLLER SYS. DET. NO.	LOCAL CONT. DETECTOR NO.
1	
2	
3	
4	
5	
6	
7	
8	

PROGRAM CONTROLLER DETECTORS ACCORDING TO THE SCHEDULE SHOWN IN THE CHART BELOW

CONTROLLER DETECTOR NO.	FUNCTION	TIMING	
		FEATURE	TIME (SEC)
1	Ø 2	EXTEND	1.8
2	Ø 2	---	---
3	Ø 4	DELAY	3
4	NU	---	---
5	Ø 2	---	---
6	Ø 5	DELAY	15
7	Ø 5	DELAY	15
8	NU	---	---
9	Ø 6	EXTEND	1.8
10	Ø 6	---	---
11	---	---	---
12	---	---	---
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---

NOTES

- TO PREVENT "FLASH-CONFLICT" PROBLEMS, WIRE ALL UNUSED LOAD SWITCHES TO FLASH RED. VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS.
- TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS, TIE UNUSED LOAD SWITCH RED OUTPUTS 1,3,7,8,9,10,11,12,13,14, 15 & 16 TO LOAD SWITCH AC+ BY INSERTING A JUMPER PLUG IN THE UNUSED LOAD SWITCH SOCKET FROM PIN 1 (LS AC+) TO PIN 3 (RED OUT). MAKE SURE ALL FLASH TRANSFER RELAYS ARE IN PLACE.
- PROGRAM CONTROLLER TO START UP IN PHASES 2 AND 6 GREEN.
- SET POWER-UP FLASH TIME TO 10 SECONDS AND IMPLEMENT ON THE MALFUNCTION MANAGEMENT UNIT. SET CONTROLLER POWER-UP FLASH TIME TO 0 SECONDS.
- ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
- PROGRAM DETECTORS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO ACCOMPLISH THE DETECTION SCHEMES SHOWN ON THE SIGNAL DESIGN PLANS.
- PROGRAM DETECTOR CALL DELAY AND EXTENSION TIMING ON THE CONTROLLER, UNLESS OTHERWISE SPECIFIED.
- SET ALL DETECTOR CARD UNIT CHANNELS TO "PRESENCE" MODE.
- PROGRAM AND WIRE THIS CONTROLLER AND CABINET TO BE PART OF THE HIGH POINT CITY SIGNAL SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER INTERCONNECTION AND OPERATION OF THIS SIGNAL WITHIN THE SYSTEM.

FIELD CONNECTION HOOK-UP CHART

PHASE	1	2	3	4	5	6	7	8	OLA	OLB	OLC	OLD	2 PED	4 PED	6 PED	8 PED
SIGNAL HEAD NO.	NU	2I,22	NU	4I,42	62	2I,42	6I,62	NU	NU	NU	NU	NU	NU	NU	NU	NU
GREEN		2G		4G			6G									
YELLOW		2Y		4Y			6Y									
RED		2R		4R	*		6R									
RED ARROW																
YELLOW ARROW				4Y	5Y											
GREEN ARROW				4G	5G											

NU = NOT USED

* A LOAD RESISTOR SHALL BE INSTALLED ON LOAD SWITCH 5 RED FIELD TERMINAL. REFER TO LOAD RESISTOR INSTALLATION DETAIL THIS SHEET.

LOAD SWITCH ASSIGNMENT DETAIL

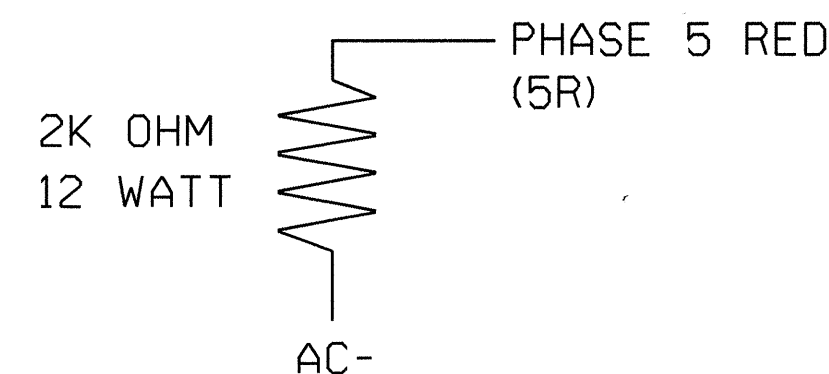
(program controller according to schedule in chart below)

LOAD SWITCH NUMBER	FUNCTION
1	Ø 1
2	Ø 2
3	Ø 3
4	Ø 4
5	Ø 5
6	Ø 6
7	Ø 7
8	Ø 8
9	OLA
10	OLB
11	OLC
12	OLD
13	Ø 2PED
14	Ø 4PED
15	Ø 6PED
16	Ø 8PED

EQUIPMENT INFORMATION

CONTROLLER.....PEEK TRAFFIC 3000
 CABINETPEEK TRAFFIC NC-6 [TS2-1]
 CABINET MOUNT.....BASE
 LOADBAY POSITIONS.....16
 LOAD SWITCHES USED.....2, 4, 5, 6
 PHASES USED.....2, 4, 5, 6
 OL/A.....NOT USED
 OL/B.....NOT USED
 OL/C.....NOT USED
 OL/D.....NOT USED

LOAD RESISTOR INSTALLATION DETAIL



NOTE: THE PURPOSE OF THIS RESISTOR IS TO LOAD THE CHANNEL RED MONITOR INPUT IN ORDER FOR THE MALFUNCTION MANAGEMENT UNIT TO USE THE FULL SIGNAL SEQUENCE MONITORING CAPABILITY ON PHASES THAT DO NOT USE THE RED DISPLAY IN THE FIELD.

HIGH POINT CITY SIGNAL SYSTEM
INTERSECTION I.D. 709

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 07-0856
 DESIGNED: 03/19/2004
 SEALED: 06/15/2004
 REVISED:

NEW INSTALLATION

 PLANS PREPARED BY : RUMMEL KLEPPER & KAHL, LLP <i>consulting engineers</i> 5800 FARINGDON PLACE SUITE 105 RALEIGH, NORTH CAROLINA 27609-3960 FOR DIVISION OF HIGHWAYS	 ELECTRICAL AND PROGRAMMING DETAILS FOR:	SR 1113 (KIVETT DRIVE) AT SR 1332 (SCIENTIFIC DRIVE)	SEAL SEAL 07438 ENGINEER JAMES O. DEATON
		DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2004 REVIEWED BY: JO DEATON PREPARED BY: MW YALCH REVIEWED BY: REVISIONS: INIT. DATE	

122 N. McDowell St., Raleigh, NC 27603