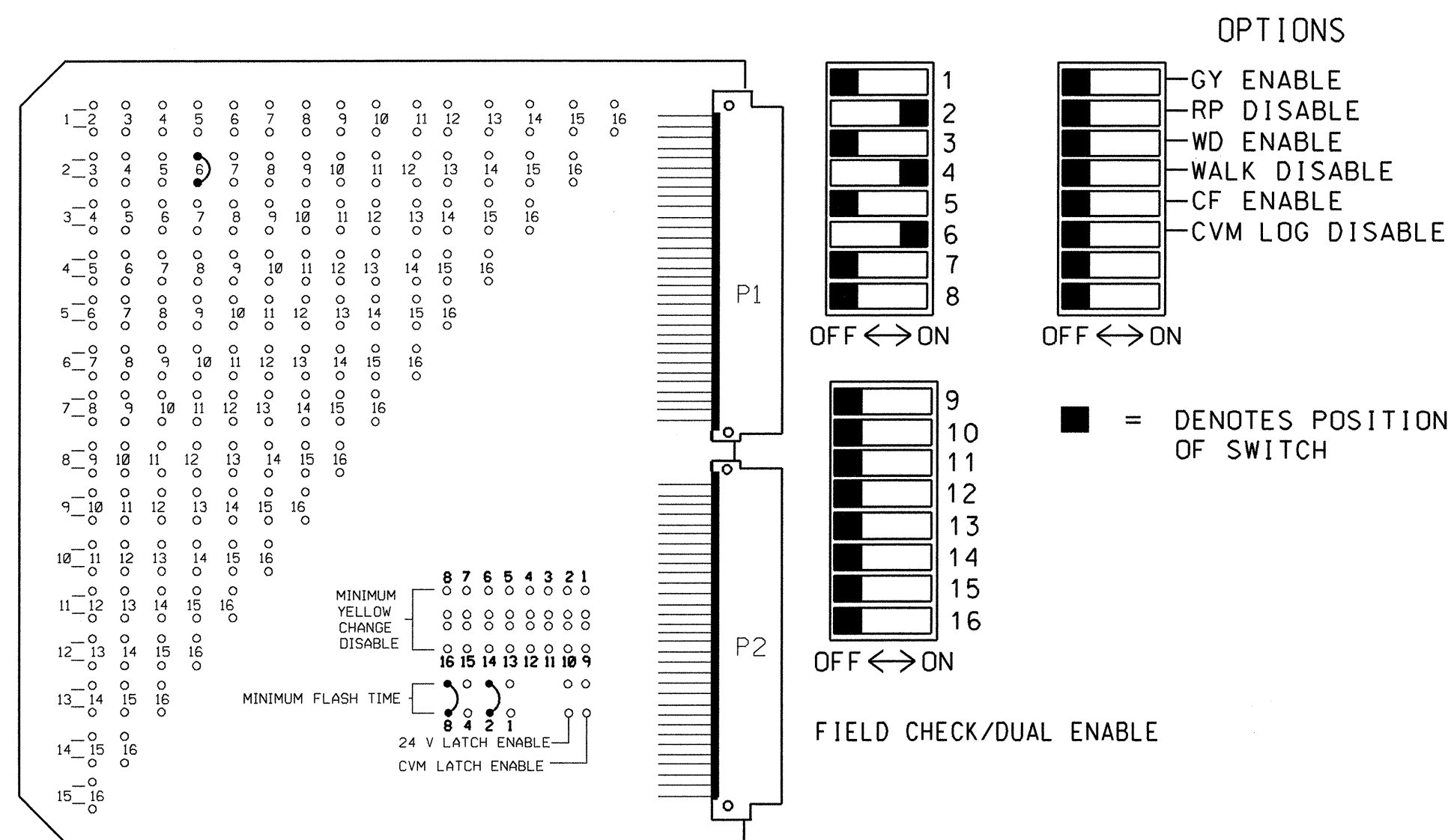


**EDI MODEL MMU-16E
MALFUNCTION MANAGEMENT UNIT
PROGRAMMING DETAIL**

(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	CHI L3 Ø2	*** S L O T	CHI L7 Ø6	CHI L5 Ø4	S L O T	S L O T	S L O T	S L O T	POWER SUPPLY AREA
	CH2 L4 Ø4	E M P T Y	CH2 L8 NOT USED	CH2 L6 Ø4	E M P T Y	E M P T Y	E M P T Y	E M P T Y	

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

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

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	---	---	---
3	Ø 2	---	---
4	Ø 4	---	---
5	Ø 4	---	---
6	Ø 4	DELAY	15
7	Ø 6	---	---
8	NU	---	---
9	---	---	---
10	---	---	---
11	---	---	---
12	---	---	---
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---

*** DETECTOR RACK OUTPUTS 1-16 SHALL BE WIRED TO A TERMINAL BLOCK. THE OUTPUT FROM THE MICROWAVE DETECTOR SHALL BE TIED TO THE TERMINAL CONNECTED TO DETECTOR 'L1'. THE FAULT STATUS FOR THIS CHANNEL SHALL BE TIED TO LOGIC GROUND.

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 1,3,5,7,8,9,10,11,12,13,14, 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.

10. A MICROWAVE SENSOR SHALL BE INSTALLED FOR VEHICLE DETECTION ON PHASE 2 AT LOCATION SHOWN ON SIGNAL DESIGN PLAN (AREA OF DETECTION LABELED '2A'). INSTALLATION SHALL BE PERFORMED PER MANUFACTURER'S INSTRUCTIONS. SENSOR SHALL BE FIELD ADJUSTED AT THE DIRECTION OF THE D.T.E. SENSOR SHALL BE WIRED SUCH THAT INPUT INTERFACE TO THE CONTROLLER IS ACHIEVED THROUGH ISOLATION CIRCUITRY.

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

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	NU	6I,62	NU	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																
GREEN ARROW																

NU = NOT USED

EQUIPMENT INFORMATION

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

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

HIGH POINT CITY SIGNAL SYSTEM
INTERSECTION I.D. 713

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 07-1579
 DESIGNED: 03/19/2004
 SEALED: 06/15/2004
 REVISED:

NEW INSTALLATION

PLANS PREPARED BY :
RUMMEL KLEPPER & KAHL, LLP
consulting engineers
 5800 FARINGDON PLACE SUITE 105
 RALEIGH, NORTH CAROLINA 27609-3960
FOR
DIVISION OF HIGHWAYS

ELECTRICAL AND PROGRAMMING DETAILS FOR:
 SR 1113 (KIVETT DRIVE)
 AT
 US 29-70, I-85 BUS.
 RAMP 'C' & RAMP 'D'
 DIVISION 07 GUILFORD COUNTY HIGH POINT
 PLAN DATE: MAY 2004 REVIEWED BY: J O DEATON
 PREPARED BY: M W YALCH REVIEWED BY:
 REVISIONS INIT. DATE
 SIGNATURE DATE
 122 N. McDowell St., Raleigh, NC 27603

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 07438
 JAMES O. DEATON
 SIGNATURE DATE
 6/15/04
 SIG. INVENTORY NO. 07-1579