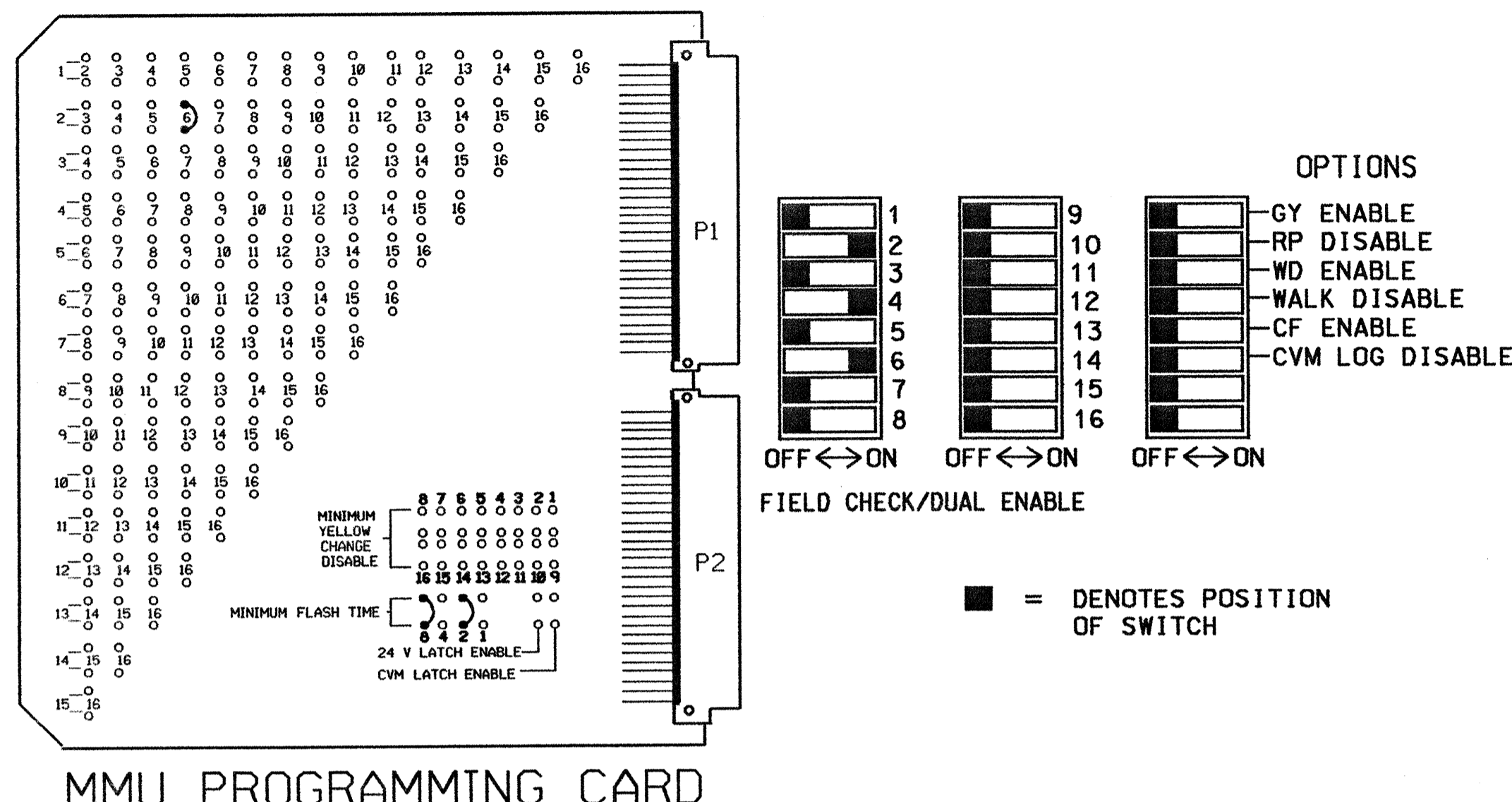


**EDI MODEL MMU-16E
MALFUNCTION MANAGEMENT UNIT
PROGRAMMING DETAIL**

(program card and set switches as shown below)



MMU PROGRAMMING CARD

NOTES

1. TO PREVENT "FLASH-CONFLICT" PROBLEMS, WIRE ALL UNUSED LOAD SWITCHES TO FLASH RED. VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS.
2. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS, TIE UNUSED LOAD SWITCH RED OUTPUTS: 1, 3, 5, 7, 8, 9, 10, 11, & 12 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.
3. PROGRAM THE CONTROLLER TO START UP IN PHASES 2 AND 6 GREEN.
4. SET POWER-UP FLASH TIME TO 10 SECONDS AND IMPLEMENT ON THE MALFUNCTION MANAGEMENT UNIT. SET CONTROLLER POWER-UP FLASH TIME TO 0 SECONDS.
5. ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
6. SET ALL DETECTOR CARD UNITS TO 'PRESENCE' MODE.
7. PROGRAM DETECTOR CALL DELAY AND EXTENSION TIMING ON THE CONTROLLER UNLESS OTHERWISE SPECIFIED.

FIELD CONNECTION HOOK-UP CHART

PHASE	1	2	3	4	5	6	7	8	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
GREEN		2G		4G		6G						
YELLOW		2Y		4Y		6Y						
RED		2R		4R		6R						
RED ARROW												
YELLOW ARROW												
GREEN ARROW												

NU = NOT USED

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	SLOT	CH1	SLOT	SLOT	SLOT	SLOT	SLOT
	L3 ø4	L1 ø2	L7 FUTURE USE	L5 ø6		L9 * FUTURE USE					
	CH2	CH2	CH2	CH2	EMPTY	CH2	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY
	L4 ø4	L2 ø2	L8 FUTURE USE	L6 ø6 *		L10 NOT USED					

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

LOOP NO.	LOOP PANEL TERMINALS
2A	L1A, L1B
2B	L2A, L2B
4A	L3A, L3B
4B	L4A, L4B
6A	L5A, L5B
6B	L6A, L6B
---	L7A, L7B
---	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.

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

CONTROLLER DETECTOR NO.	FUNCTION	TIMING	
		FEATURE	TIME (SEC)
1	ø 2	EXTEND	2.3
2	ø 2	---	---
3	ø 4	DELAY	3
4	ø 4	DELAY	15
5	ø 6	EXTEND	2.3
6	ø 6	---	---
7	FUTURE	---	---
8	FUTURE	---	---
9	FUTURE	---	---
10	---	---	---
11	---	---	---
12	---	---	---
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---

* THIS DETECTOR IS EQUIPPED WITH DELAY AND EXTEND TIMER, WHICH WILL BE REQUIRED FOR USE ONLY ON THE FINAL DESIGN.

EQUIPMENT INFORMATION

CONTROLLER.....CONTRACTOR SUPPLIED ECONOLITE ASC/2
 CABINET.....CONTRACTOR SUPPLIED ECONOLITE NC-3
 CABINET MOUNT.....BASE
 LOADBAY POSITIONS.....12
 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	ø 2 PED
10	ø 4 PED
11	ø 6 PED
12	ø 8 PED

THIS ELECTRICAL DETAIL IS FOR THE TEMPORARY SIGNAL DESIGN: 12-1691T
 DESIGNED: AUGUST 2002*
 SEALED: 1-27-03*
 REVISED: N/A

* BY ARCADIS G & M OF NORTH CAROLINA, INC.
 801 CORPORATE CENTER DRIVE, SUITE 300
 RALEIGH, NC 27607-5073
 TEL: 919/854-1282 FAX: 919/854-5448

TS-2 TYPE 1 CABINET

TEMPORARY DESIGN

Prepared in the Office of: 222 N. McDowell St., Raleigh, NC 27603	US 70 at OLD US 70 (EASTERN INTERSECTION)		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022013 GEORGE C. BRUNN
	DIVISION 12 IREDELL COUNTY E. of STATESVILLE PLAN DATE: JANUARY 2003 PREPARED BY: F.E. RUSS	REVIEWED BY: T. J. J... REVIEWED BY:	