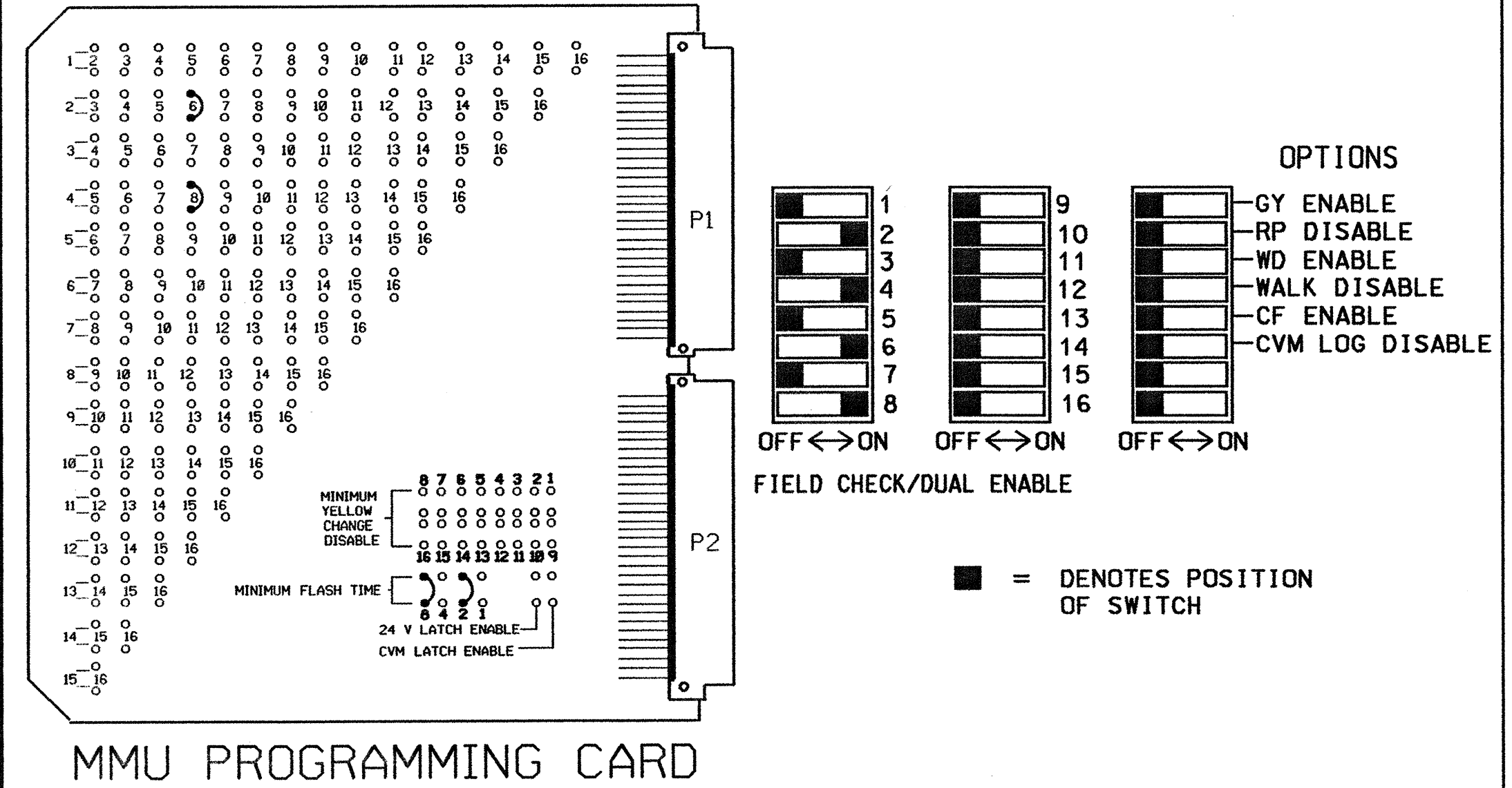


**EDI MODEL MMU-16E
MALFUNCTION MANAGEMENT UNIT
PROGRAMMING DETAIL**

(program card and set switches as shown below)



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, 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. PROGRAM PHASES 4 AND 8, ON CONTROLLER UNIT, FOR DUAL ENTRY.
7. SET ALL DETECTOR CARD UNITS TO 'PRESENCE' MODE.
8. 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	8I,82	NU	NU	NU	NU
GREEN		2G		4G		6G		8G				
YELLOW		2Y		4Y		6Y		8Y				
RED		2R		4R		6R		8R				
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	CH1	CH1	SLOT	CH1	SLOT	SLOT	SLOT
	L3 ø4	L1 ø2	L7 ø6	L5 ø4	L11 FUTURE USE	L9 ø8		L13 FUTURE USE			
	CH2 L4 ø4	CH2 L2 ø2	CH2 L8 ø6	CH2 L6 ø4	CH2 L12 NOT USED	CH2 L10 ø8	EMPTY	CH2 L14 FUTURE USE	EMPTY	EMPTY	EMPTY

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
4C	L5A, L5B
—	L6A, L6B
6A	L7A, L7B
6B	L8A, L8B
8A	L9A, L9B
8B	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	—	—
4	ø 4	—	—
5	ø 4	DELAY	15
6	—	—	—
7	ø 6	EXTEND	2.3
8	ø 6	—	—
9	ø 8	—	—
10	ø 8	DELAY	10
11	FUTURE	—	—
12	—	—	—
13	FUTURE	—	—
14	FUTURE	—	—
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
 CABINET.....CONTRACTOR SUPPLIED ECONOLITE NC-3 CABINET MOUNT.....BASE
 LOADBAY POSITIONS.....12
 LOAD SWITCHES USED.....2, 4, 6, 8
 PHASES USED.....2, 4, 6, 8
 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: 12-1681T
 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

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Office of:

 122 N. McDowell St., Raleigh, NC 27603

US 70 at BUSINESS PARK DR.

DIVISION 12 IREDELL COUNTY E. of STATESVILLE
 PLAN DATE: JANUARY 2003 REVIEWED BY: T. J. JAMES
 PREPARED BY: F.E. RUSS REVIEWED BY:

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 022013
 GEORGE C. BROWN

REVISIONS: INIT. DATE

Signature: *George C. Brown* DATE: 1/31/04
 SIG. INVENTORY NO. 12-1681T