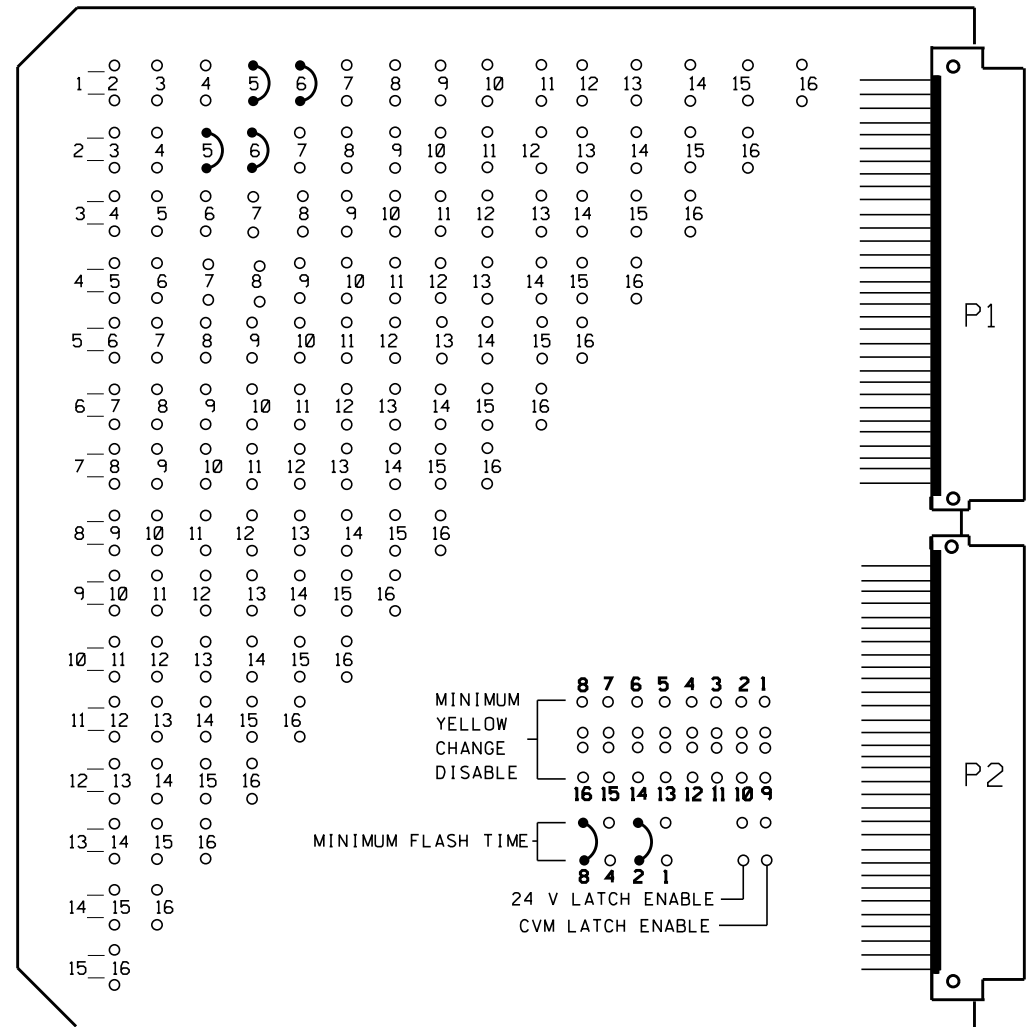


**EDI MODEL MMU2-16LE
MALFUNCTION MANAGEMENT UNIT
PROGRAMMING DETAIL**

(program card and tables as shown below)



MMU PROGRAMMING CARD

**FIELD CHECK ENABLE
DUAL IND ENABLE
RED FAIL ENABLE**

CHANNEL NUMBER	ENABLE/DISABLE
1	ENABLE
2	ENABLE
3	ENABLE
4	ENABLE
5	ENABLE
6	ENABLE
7	DISABLE
8	DISABLE
9	DISABLE
10	DISABLE
11	DISABLE
12	DISABLE
13	DISABLE
14	DISABLE
15	DISABLE
16	DISABLE

UNIT OPTIONS

OPTION	SETTING
RECURRENT PULSE	ON
WALK DISABLE	OFF
LOG CVM FAULTS	ON
EXTERN WATCHDOG	OFF
24V-2=12VDC	OFF
PGM CARD MEMORY	ON
LEDgeurd	ON
FORCE TYPE 16	OFF
TYPE12-SOLC	OFF
VM 3x/Day Latch	ON

FLASHING YELLOW ARROW

CONFIG MODE	SETTING
CONFIG MODE	A
ENABLE CHANNEL PAIR, FYA	
CH 1-9	OFF
CH 3-10	OFF
CH 5-11	OFF
CH 7-12	OFF
RED/YEL INPUT ENABLE	
CH 1-9	OFF
CH 3-10	OFF
CH 5-11	OFF
CH 7-12	OFF
FLASH RATE FAULT	OFF
FYA TRAP DETECT	OFF

MMU PROGRAMMING NOTE
ENSURE YELLOW CHANGE PLUS RED CLEARANCE MONITORING IS ENABLED FOR ALL CHANNELS.

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 7,8,9,10,11,12,13,14 15 and 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 phases 2 and 6, on controller unit, for volume density operation.
- This controller and cabinet are part of the Greenville Signal System.

SIGNAL HEAD HOOK-UP CHART

PHASE	1	2	3	4	5	6	7	8	2 PED	4 PED	6 PED	8 PED	OLA	OLB	OLC	OLD
SIGNAL HEAD NO.	11	21,22	31	32	41	42	43	51,52	61,62	63,64	NU	NU	NU	NU	NU	NU
RED		2R	3R	3R	4R	4R		6R								
YELLOW		2Y	3Y	3Y	4Y	4Y		6Y								
GREEN		2G	3G	3G	4G	4G		6G								
RED ARROW	1R				4R			5R								
YELLOW ARROW	1Y				4Y			5Y								
ARROW	1G		3G		4G	4G		5G								
WALK																
DON'T WALK																

DETECTOR RACK SET-UP DETAIL

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

DETECTOR RACK #1

DETECTOR RACK #1	CH1	CH1	CH1	CH1	CH1	CH1	CH1	SLOT	SLOT	SLOT
	L3	L1	L7	L5	L11	L9	L15			
∅ 2	∅ 1	∅ 3	NOT USED	∅ 5	∅ 4	∅ 6	∅ 6			
	CH2	CH2	CH2	CH2	CH2	CH2	CH2			
	L4	L2	L8	L6	L12	L10	L16			
	∅ 2	NOT USED	∅ 3	NOT USED	∅ 5	∅ 4	NOT USED			

DETECTOR RACK #2

DETECTOR RACK #2	CH1	SLOT	SLOT	SLOT
	L17	∅ 4		
	CH2			
	L18	NOT USED		

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

LOOP NO.	LOOP PANEL TERMINALS
1A	L1A, L1B
-	L2A, L2B
2A	L3A, L3B
2B	L4A, L4B
-	L5A, L5B
-	L6A, L6B
3A	L7A, L7B
3B	L8A, L8B
4A	L9A, L9B
4B	L10A, L10B
5A	L11A, L11B
5B	L12A, L12B
6A	L13A, L13B
6B	L14A, L14B
6C	L15A, L15B
-	L16A, L16B
4C	L17A, L17B
-	L18A, L18B
-	L19A, L19B
-	L20A, L20B
-	L21A, L21B
-	L22A, L22B
-	L23A, L23B
-	L24A, L24B

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	∅ 1	-	-
2	-	-	-
3	∅ 2	-	-
4	∅ 2	-	-
5	-	-	-
6	-	-	-
7	∅ 3	DELAY	3
8	∅ 3	-	-
9	∅ 4	DELAY	3
10	∅ 4	DELAY	10
11	∅ 5	DELAY	3
12	∅ 5	-	-
13	∅ 6	-	-
14	∅ 6	-	-
15	∅ 6	-	-
16	-	-	-
17	∅ 4	-	-
18	-	-	-
19	-	-	-
20	-	-	-
21	-	-	-
22	-	-	-
23	-	-	-
24	-	-	-

LOAD SWITCH ASSIGNMENT DETAIL

(program controller according to schedule in chart below)

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

EQUIPMENT INFORMATION

CONTROLLER.....ECONOLITE ASC/3
 CABINETNC-8A [TS-2]
 CABINET MOUNT.....BASE
 LOADBAY POSITIONS.....16
 LOAD SWITCHES USED.....1,2,3,4,5,6
 PHASES USED.....1,2,3,4,5,6
 OLA.....NOT USED
 OLB.....NOT USED
 OLC.....NOT USED
 OLD.....NOT USED

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 02-0053T1
 DESIGNED: JUNE 2014
 SEALED: 9/2/2014
 REVISED: N/A

TEMPORARY DESIGN 1 - TMP PHASE 1

	ELECTRICAL AND PROGRAMMING DETAILS FOR:		US 13-NC 11-43-903 (MEMORIAL DRIVE)	
	Prepared For:		AT	
SR 1200 (STANTONSURG ROAD) / FARMVILLE BOULEVARD		DIVISION 2 PITT COUNTY GREENVILLE		9/2/2014
PLAN DATE: JUNE 2014		REVIEWED BY: SL PHILLIPS		
PREPARED BY: SP PENNINGTON		REVIEWED BY:		SIGNATURE DATE
REVISIONS		INIT. DATE		

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DocuSigned by: Stacie Phillips
 UIC7AS6ED08437
 SIG. INVENTORY NO. 02-0053T1