

CHAPTER 10 Operation (level 2 password)

Menu options available under this level of access are:

HISTORY: ALARM, EVENT, ZONE, CURRENT
 LEVEL PASSWORD: (ENTRY)
 1 SPECIAL: LEVELS, SETTIME

ENABLE / DISABLE: ZONES, DEVICES, CIRCUITS, COMMUNICATION
 LEVEL SPECIAL: SENSE, RESET HI-LO LEVELS, WALKTEST
 2 DIAGNOSTICS

10.1 LEVEL 2 PASSWORD OPERATION

Level 2 password allows access to enabling and disabling of circuits, sensitivity settings, walk-test operation, and other special functions. Access to this level 2 is via the password entry method per Section 9.5. Access to all menu functions is via the main menu options below.

MAIN MENU (M)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
A	1	-	H	I	S	T	O	R	Y		4	-	E	N	A	B	L	E			
B	2	-	P	A	S	S	W	R	D		5	-									
C	3	-	S	P	E	C	I	A	L		6	-	C	O	N	F	I	G			
D	S	E	L	E	C	T		F	U	N	C	T	I	O	N		K	E	Y		

F1	HISTORY (H)	F4	ENABLE/DISABLE (E)LEVEL2
F2	PASSWORD (A)	F5	
F3	SPECIAL (P)	F6	CONFIGURATION (C)LEVEL 3
ESC	RETURN TO SYS MSG (1)	ENT	
←		→	
# %		HLP	

10.2 ENABLING/DISABLING

Enabling and disabling of system capabilities can be accessed by pressing F4 from the main menu. The Enable/Disable menu is displayed which allows the options of:

- F1- Disabling zones of operation (singularly or in groups).
- F2- Disabling addressable devices on a loop (singularly or in groups).
- F3- Disabling of indicating and relay circuits on the CSC Controller.
- F4- Disabling of serial data circuits on the CSC Controller.

ENABLE/DISABLE MENU (E)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	1	-	Z	O	N	E	S				4	-	C	O	M	M	U	N	.	
B	2	-	D	E	V	I	C	E	S											
C	3	-	C	I	R	C	U	I	T	S										
D	S	E	L	E	C	T		F	U	N	C	T	I	O	N		K	E	Y	

F1	ZONES(E1)	F4	COMMUN PORTS (E4)
F2	DEVICES (E2)	F5	
F3	CIRCUITS (E3)	F6	
ESC	RETURN TO MAIN (M)	ENT	
←		→	
# %		HLP	

10.2.1 Disabling Zones

ENABLE/DISABLE ZONES (E1)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	E	N	A	/	D	I	S		Z	O	N	E		X	X	X	-	Z	Z	Z
B	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
D	Y	Y	Y		Z	O	N	E	S		X	X	X	-	X	X	X			

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	RETURN (E)	ENT	MOD ZONES AS SHOWN
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
# %	DATA ENTRY	HLP	HELP (HL - E1)

Note: Disabling zone does not disable inputs. Inputs will remain operating as will the display and other enabled zone outputs.

A14-16 = INITIAL ZONE SHOWN IN C1 (VALUES IN INCREMENTS OF 20)

A18-20 = LAST ZONE SHOWN IN C20 (VALUE = C1 + 19)

C1-20 = CURRENT OR DESIRED STATUS OF ZONE

(E = ENABLED, D = DISABLED, - = UNUSED)

D1-3 = DESIRED ACTION FOR ZONES DISPLAYED IN ROW D (ENA, DIS)

D11-13 = FIRST ZONE TO CHANGE. IF CURSOR IS IN ROW C, VALUE IS CURSOR ZONE.

D15-17 = LAST ZONE TO CHANGE. IF CURSOR IS IN ROW C, VALUE IS CURSOR ZONE.

EXAMPLE: ENABLE/DISABLE ZONES (E1)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	E	N	A	/	D	I	S		Z	O	N	E		0	4	1	-	0	6	0
B	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
C	E	E	E	E	E	D	E	D	D	D	E	E	E	-	-	-	E	E	E	
D	E	N	A		Z	O	N	E	S		0	3	4	-	0	8	1			

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	RETURN (E)	ENT	MOD ZONES AS S HOWN
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s	DATA ENTRY	HLP	HELP (HL - E1)

ROW C SHOWS THE STATUS OF ZONES 41 THRU 60 AS DENOTED BY A14-A20. ZONES 46 & 48-51 ARE DISABLED AND OTHERS ENABLED OR NOT USED. IF THE CURSOR RESIDES @ C5 (ZONE 45), F1 OR F4 WILL DISABLE THIS ZONE. ROW D ALLOWS ENABLING OR DISABLING A SEQUENTIAL GROUP OF ZONES. IN THIS CASE, PRESSING ENTER ENABLES ZONES 34 THRU 81. TO DISABLE THIS GROUP, PRESS F1(OR F4) WHILE THE CURSOR RESIDES WITHIN D1-3. WHEN ENTER IS PRESSED, CHANGES ARE MADE & ROW C SHOWS ZONE STATUS.

10.2.2 Disabling Devices

ENABLE/DISABLE DEVICES (E2)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	E	N	A	/	D	I	S		D	E	V	X	-	X	X	X	-	X	X	X
B	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
D	F	5	-	R	A	N	G	E		D	I	S	A	B	L	E				

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	TOGGLE ROW B TO TYPE	F5	ENA/DIS RANGE (E2-5)
F3		F6	
ESC	RETURN (E)	ENT	MOD ZONES AS SHOWN
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s	DATA ENTRY	HLP	HELP (HL - E2A)

A12 = LOOP FOR INITIAL DEVICE SHOWN IN C1
 A14-16 = ADDRESS FOR INITIAL DEVICE SHOWN IN C1
 A18-20 = ADDRESS FOR LAST DEVICE SHOWN IN C20 (VALUE = C1 +19)
 C1-20 = CURRENT STATUS OF DEVICES
 (E = ENABLED, D = DISABLED, - = UNUSED)

D10-16 = ENABLE OR DISABLE
 F2 WILL TOGGLE ROW B TO DISPLAY DEVICE TYPE AT ADDRESS POSITION.

EXAMPLE: ENABLE/DISABLE DEVICES (E2)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	E	N	A	/	D	I	S		D	E	V	2	-	1	0	1	-	1	2	0
B	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
C	E	E	E	E	E	E	E	E	-	-	-	E	E	D	D	D	D	D	D	D
D	E	N	A						D	E	V	0	0	1	-	0	2	1		

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	TOGGLE ROW B TO TYPE	F5	ENA/DIS RANGE (E25)
F3		F6	
ESC	RETURN (E)	ENT	SEND CONFIG
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s	DATA ENTRY	HLP	HELP

ROW C SHOWS THE CURRENT STATUS OF DEVICES ON LOOP 2 ADDRESS 101 THRU 120 AS DENOTED BY A12-A20. DEVICES 2-114 THRU 2-120 ARE DISABLED. IF THE CURSOR RESIDES @ C16 (DEVICE 2-116); THEN PRESSING F1 (OR F4) WILL TOGGLE BETWEEN ENABLE AND DISABLE. PRESSING F5 WILL ALLOW THE USER TO DISABLE

ENABLE/DISABLE DEVICE RANGE (E25)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	E	N	A	/	D	I	S		R	A	N	G	E		S	E	L	E	C	T
B	1	-	X	X	X	:	Y	Y	Y		2	-	X	X	X	:	Y	Y	Y	
C	3	-	X	X	X	:	Y	Y	Y		4	-	X	X	X	:	Y	Y	Y	
D	P	R	E	S	S		E	N	T		E	R	:	E	N	A	B	L	E	

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	CURRENT ADR POLL	F5	
F3		F6	
ESC	RETURN (E2)	ENT	MOD ZONES AS SHOWN
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s		HLP	HELP (HL - E25)

B3-9 = LOOP 1 START ADDRESS: END ADDRESS TO ENA/DIS
 B13-19 = LOOP 2 START ADDRESS: END ADDRESS TO ENA/DIS
 C3-9 = LOOP 3 START ADDRESS: END ADDRESS TO ENA/DIS
 C13-19 = LOOP 4 START ADDRESS: END ADDRESS TO ENA/DIS
 D14-20 = ENABLE OR DISABLE ADDRESS RANGES DISPLAY

10.2.3 Disabling CSC Indicating and Relay Circuits

ENABLE/DISABLE CIRCUITS (E3)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0		
A	E	N	A	/	D	I	S				C	K	T	S	:				1	2	3	4
B						R	E	L	A	Y	S		P	4	1	:		E	E	D	D	
C						R	E	L	A	Y	S		P	4	2	:		E	E	-	-	
D						O	U	T	P	U	T	S		A	U	D	:	E	E			

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	RETURN (E)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s		HLP	HELP (HL - E3)

B17-20 = STATUS OF FOUR P41 AUX. RELAYS (E=ENABLED, D=DISABLED)
 C17-20 = STATUS OF FOUR P42 AUX. RELAYS (E=ENABLED, D=DISABLED)
 D17-18 = STATUS OF TWO CSC OUTPUT CKTS (E=ENABLED, D=DISABLED)

10.2.4 Disabling CSC External and Loop Communication Circuits

ENABLE/DISABLE COMMUNICATIONS (E4)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0		
A	E	N	A	/	D	I	S				C	O	M	M								
B																			1	2	3	4
C		E	X	T	E	R	N	A	L		P	O	R	T	S	:	E	E	E	E		
D		A	D	D	R		D	E	V		L	O	O	P	S	:	E	E	E	E		

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	RETURN (E)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s		HLP	HELP (HL - E4)

C17-20 = EXTERNAL COMMUNICATION PORT. (E=ENABLE, D=DISABLE)
 D17-20 = ADDRESSABLE DEVICE LOOP. (E=ENABLE, D=DISABLE)

10.2.5 Disabling Operational Notes

Disabling of circuits, zones, and devices is a temporary means to remove devices from service during a time of system troubleshooting or maintenance. It is not intended as a means to permanently remove devices from a system. If devices are disabled, then subsequently enabled, a system reset shall be performed to ensure all devices are properly initialized.

10.3 SPECIALS SETTINGS

Pressing F3 from the main menu enters the special display below. Pressing F1 from the special menu enters the "Current Sensitivity" display which allows viewing and modifying of sensor sensitivities. "Current" implies present time, which is the sensitivity in use. This modifies alarm values in use but does not modify pre-alarm values or stored alarm values. Upon a system reset or timebase sensitivity change (between alarm 1 & alarm 2), the value modified by this display is replaced by the normal configured value.

SPECIAL MENU (P)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	1	-	S	E	N	S	E				4	-	W	A	L	K	T	E	S	T
B	2	-	L	E	V	E	L	S			5	-	D	I	A	G	N	O	S	.
C	3	-	S	E	T	T	I	M	E		6	-								
D	S	E	L	E	C	T		F	U	N	C	T	I	O	N		K	E	Y	

F1	SENSE (P1) LEVEL 2	F4	WALK-TEST (P4) LEVEL 2
F2	DEVICE LEVELS (P2)	F5	DIAGNOSTICS (P5) LEVEL 2
F3	SET TIME (P3)	F6	
ESC	RETURN (M)		
←			
#'s		HLP	HELP (HL - P)

10.3.1 Sensitivity Settings

CURRENT SENSITIVITY (P1)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
A	C	U	R	R	E	N	T				S	E	N	S	I	T	I	V	I	T	Y
B	X	-	Y	Y		T	:	S	S		T	:	S	S		T	:	S	S		
C	X	-	Y	Y		T	:	S	S		T	:	S	S		T	:	S	S		
D	X	-	Y	Y		T	:	S	S		T	:	S	S		T	:	S	S		

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	CURRENT ADR POLLING	F5	
F3		F6	
ESC	RETURN (P)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s		HLP	HELP (HL - P1)

B1-5 = STARTING LOOP/ADDRESS FOR 3 DEVICES SHOWN IN ROW B
 B7 = DEVICE TYPE (P = PHOTO, I = ION, H = HEAT)
 B9-10 = DEVICE SENSITIVITIES (## = SENSOR, - - = NON-SENSOR)

Note: Other row B, C, & D data is type/sensitivity data for next addresses.

These values are programmed as:

Photo's % obscuration;	25	=	2.5 % OBS
Ion's MIC	80	=	80 MIC
Heat's Fahrenheit (plus 100F)	45	=	145 Fahrenheit

EXAMPLE-CURRENT SENSITIVITY (P1)

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	C	U	R	R	E	N	T	S	E	N	S	I	T	I	V	I	T	Y	
B	1	-	0	6	4	P	:	1	0	P	:	1	5	P	:	2	0		
C	1	-	0	6	7	H	:	3	5	-	:	-	-	I	:	5	5		
D	1	-	0	7	0	-	:	-	-	-	:	-	-	I	:	7	0		

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	RETURN (P)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#s		HLP	

ADDRESSES 064 TO 066 ARE PHOTOS WITH CURRENT ALARM SENSITIVITIES OF 10,15, & 20. ADDRESS 067 IS A HEAT WITH A SENSITIVITY OF 35 . ADDRESSES 69, 72 ARE IONS WITH SENSITIVITIES OF 55, 77. ADDRESSES 068, 070, 071 ARE NOT PRESENT.

10.3.2 Reset Device, Levels Hi-Lo Ranges

From the SPECIAL menu, the device levels can be accessed by pressing F2 (see Chapter 9). Press the F5 key to reset the high/low values (which resets values on selected sensors).

RESET HI-LO RANGES & VERIFICATION COUNTER (P25)

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
A	C	L	E	A	R	-	L	O	O	H	I	/	V	C	-	R	A	N	G	E
B	1	-	X	X	X	:	X	X	X	2	-	X	X	X	:	X	X	X		
C	3	-	X	X	X	:	X	X	X	4	-	X	X	X	:	X	X	X		
D	P	R	E	S	S	E	N	T	E	R	T	O	C	L	E	A	R			

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	RETURN (P2)	ENT	RESET HI-LO RANGES
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#s	ADDR.DATA ENTRY	HLP	HELP (HL - P25)

- B3-5 = LOOP 1 START ADDRESS TO RESET
- B7-9 = LOOP 1 END ADDRESS TO RESET
- B14-16 = LOOP 2 START ADDRESS TP RESET
- B18-20 = LOOP 2 END ADDRESS TO RESET
- C3-5 = LOOP 3 START ADDRESS TO RESET
- C7-9 = LOOP 3 END ADDRESS TO RESET
- C14-16 = LOOP 4 START ADDRESS TO RESET
- C18-20 = LOOP 4 END ADDRESS TO RESET

10.3.3 Walk-Test (P4)

Pressing F3 in the main menu enters into the "SPECIAL Menu". Pressing F4 from the SPECIAL Menu enters into the Walk-test Display below.

The walk-test is a means to test portions of the system without unneeded disturbance to people in some areas of the system. The walk-test is a toggle mode, it is either off or on. While on, the system accepts normal alarm events and responds with typical local annunciation (if required). However, output devices may or may not be configured to respond to walk-test events per these rules:

- SOM: Individually configured to respond to walk-test events.
- R2M: Individually configured to respond to walk-test events.
- SRM: Does not respond to walk-test events.
- AUD1 & AUD2: Automatically responds to walk-test events.

WARNING: Upon entering the walk-test mode, a time-out parameter is established. If no input events occur within this time-out, then the system exits the walk-test mode. The system records a “WALK-TEST ACTIVE” trouble upon entry to walktest. This trouble will remain active until the panel is reset or “WALK-TEST EXPIRED” time-out.

WALK-TEST (P4)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
A	W	A	L	K	T	E	S	T	S	T	A	T	U	S	:	Z	Z	Z			
B	B	E	E	P	E	R	R	E	S	O	U	N	D	:	Z	Z	Z				
C																					
D	T	I	M	E	O	U	T	X	X	M	I	N	U	T	E	S					

F1	DEC. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	RETURN (P)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
# 's		HLP	HELP (HL - P4)

A18-20 = CURRENT WALK-TEST STATUS (ON, OFF)

B18-20 = LOCAL PIEZO OPERATION (YES = SOUND FOR EVENTS - NO = SILENT ON EVENTS)

D9-10 = WALK-TEST TIME-OUT TIMER (10-30 MINUTES, IN 1 MINUTE INCREMENTS)

10.4 DIAGNOSTICS

Pressing F3 in the Main Menu enters into the “SPECIAL Menu”. Pressing F5 from the SPECIAL Menu enters into the “Diagnostics” display below.

DIAGNOSTICS (P5)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	1	-	P	O	W	E	R	A	4	-	G	R	N	D	F	L	T			
B	2	-	P	O	W	E	R	B	5	-	M	O	R	E						
C	3	-	S	U	P	O	U	T	6	-	K	E	Y	P	A	D				
D	S	E	L	E	C	T	F	U	N	C	T	I	O	N	K	E	Y			

F1	POWER A (P51)	F4	GROUND FAULT (P54)
F2	POWER B (P52)	F5	DIAGNOSTICS 2 (P55)
F3	SUP. OUTPUTS (P53)	F6	KEY PAD TEST (P56)
ESC	RETURN (P)	ENT	
←		→	
# 's		HLP	

POWER SUPPLY DIAGNOSTICS 1 (P51)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	B	A	T	-	Y	A	C	-	Y	A	U	X	-	Y	C	N	T			
B	T	X	X	X	B	X	X	X	T	X	X	X	Y	Y	Y					
C	V	X	X	X	R	X	X	X	V	X	X	X	S	P	S					
D					V	X	X	X							X					

F1		F4	
F2		F5	
F3		F6	
ESC	DIAGNOSTICS (P5)	ENT	
←		→	
# 's		HLP	HELP (HL - P51)

- A1-5 = P1 BAT BATTERY ENABLED (Y), DISABLED (N)
- A7-10 = P1 24VAC ENABLED (Y), DISABLED (N)
- A12-16 = P1 BAT AUXILIARY IN DC ENABLED (Y), DISABLED (N)
- B1-4 = P1 BAT BATTERY TROUBLE THRESHOLD IN A/D COUNTS
- B7-10 = P1 24VAC AC BROWN-OUT THRESHOLD IN A/D COUNTS
- B12-15 = P1 BAT AUXILIARY TROUBLE THRESHOLD IN A/D COUNTS
- B18-20 = COUNTER, 255-0
- C1-4 = P1 BAT CURRENT BATTERY VOLTAGE, IN A/D COUNTS
- C7-10 = P1 24VAC AC RESTORE THRESHOLD IN A/D COUNTS
- C12-15 = P1 BAT CURRENT AUXILIARY VOLTAGE, IN A/D COUNTS
- D7-10 = P1 24VAC CURRENT VOLTAGE, IN A/D COUNTS
- D20 = SUPPLEMENTAL POWER SUPPLY ENABLED (YES), DISABLED (NO)

POWER SUPPLY DIAGNOSTICS 2 (P52)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	B	A	T	-	Y		A	C	-	Y		A	U	X	-	Y		C	N	T
B	T	X	X	X			B	X	X	X		T	X	X	X			Y	Y	Y
C	V	X	X	X			R	X	X	X		V	X	X	X			S	P	S
D							V	X	X	X										X

F1		F4	
F2		F5	
F3		F6	
ESC	DIAGNOSTICS (P5)	ENT	
←		→	
# %		HLP	HELP (HL - P52)

- A1-5 = P21 BAT 2 BATTERY ENABLED (Y), DISABLED (N)
- A7-10 = P21 24VAC #2 ENABLED (Y), DISABLED (N)
- A12-16 = P21 BAT 2 AUXILIARY IN DC ENABLED (Y), DISABLED (N)
- B1-4 = P21 BAT 2 BATTERY TROUBLE THRESHOLD IN A/D COUNTS
- B7-10 = P21 24VAC #2 AC BROWN-OUT THRESHOLD IN A/D COUNTS
- B12-15 = P21 BAT 2 AUXILIARY TROUBLE THRESHOLD IN A/D COUNTS
- B18-20 = COUNTER, 255-0
- C1-4 = P21 BAT 2 CURRENT BATTERY VOLTAGE, IN A/D COUNTS
- C7-10 = P21 24VAC #2 AC RESTORE THRESHOLD IN A/D COUNTS
- C12-15 = P21 BAT 2 CURRENT AUXILIARY VOLTAGE, IN A/D COUNTS
- D7-10 = P21 24VAC #2 CURRENT VOLTAGE, IN A/D COUNTS
- D20 = SUPPLEMENTAL POWER SUPPLY ENABLED (YES), DISABLED (NO)

SUPPLEMENTAL OUTPUTS (P53)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	A	U	D	1	E			A	U	D	2	E		S	H	T		O	P	T
B	V	X	X	X				V	X	X	X		X	X	X			X	X	X
C	S	T	A	T	:			S	T	A	T	:						S	W	:
D	O	F	F					O	F	F								X	X	X

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	DIAGNOSTICS (P5)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
# %		HLP	HELP (HL - P53)

- A1-5 = P8 AUD1 STATUS, ENABLED (E) DISABLED (D)
- A8-12 = P9 AUD2 STATUS, ENABLED (E) DISABLED (D)
- B1-4 = P8 AUD1 CURRENT VOLTAGE IN A/D COUNTS
- B8-11 = P9 AUD2 CURRENT VOLTAGE IN A/D COUNTS
- B14-16 = P8 & P9 AUD1 & 2 SHORT CKT. TROUBLE THRESHOLD IN A/D COUNTS
- B18-20 = P8 & P9 AUD1 & 2 OPEN CKT. TROUBLE THRESHOLD IN A/D COUNTS
- D1-3 = P8 AUD1 PRESENT STATUS: ACTIVATED (ON) OFF (OFF)
- D8-10 = P9 AUD2 PRESENT STATUS: ACTIVATED (ON) OFF (OFF)
- D20 = SW1 ENABLED (ENA) DISABLED (DIS) SWITCH STATUS

GROUND FAULT TEST (P54)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	G	R	O	U	N	D		F	A	U	L	T		T	R	E	:	X	X	X
B	G	R	O	U	N	D		F	A	U	L	T		C	N	T	:	X	X	X
C																				
D																				

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	DIAGNOSTICS (P5)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
# %	DATA ENTRY	HLP	HELP (HL - P54)

- A1-20 = GROUND FAULT TROUBLE THRESHOLD IN A/D COUNTS
- B1-20 = PRESENT GROUND FAULT STATUS IN A/D COUNTS (COUNTER INCREASES AS GND FAULT OCCURS)

SUPPLEMENTAL RELAYS (P553)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	S	U	P	P	L	E	M	E	N	T	A	L		R	E	L	A	Y	S	:
B											P	4	1			P	4	2		
C		T	R		A	L		S	U		1	2	3	4		1	2	3	4	
D		X			X			X			X	X	X	X		X	X	X	X	

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	DIAGNOSTICS 2 (P55)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
# %		HLP	HELP (HL - P553)

Note: Use F1 & F2 to toggle RELAY status; 0 (OFF), 1 (ON).

- D3 = PRESENT STATUS OF P2 TROUBLE RELAY
- D6 = PRESENT STATUS OF P2 ALARM RELAY
- D9 = PRESENT STATUS OF P2 SUPERVISORY RELAY
- D11-14 = PRESENT STATUS OF P41 RELAYS 1-4
- D16-19 = PRESENT STATUS OF P42 RELAYS 1-4

Note: P2 trouble relay is normally energized. Status is 0 = ENERGIZED (matching board silkscreen for normal operation) until a trouble occurs, then it is 1 = De-ENERGIZED. Other relays status is 0 = De-ENERGIZED, 1 = ENERGIZED

BACKLIGHT TEST (P554)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A			B	A	C	K	L	I	T	E		I	S		O	N				
B																				
C																				
D																				

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2		F5	
F3		F6	
ESC	DIAGNOSTICS 2 (P55)	ENT	
←		→	
# %	SEE BELOW	HLP	HELP (HL - P554)

A15-17 = PRESENT STATUS OF LCD BACKLIGHT, USE F1 & F2 KEY TO TOGGLE STATUS OFF/ON, OR USE "1" KEY FOR ON AND "0" KEY FOR OFF.

LOOP TEST (P556)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	L	O	O	P	:						1	2	3	4						
B	E	N	/	D	I	S					E	E	E	E						
C	C	L	A	/	C	L	B				B	B	B	B						
D	S	T	A	T	U	S				O	K	O	K	O	K	O	K			

F1		F4	
F2		F5	
F3		F6	
ESC	DIAGNOSTICS 2 (P55)	ENT	
←		→	
# %		HLP	HELP (HL - P556)

Note: This Diagnostic screen is for present status only.

- B10 = PRESENT STATUS OF P6 LOOP 1; ENABLED (E) / DISABLED (D)
- B13 = PRESENT STATUS OF P7 LOOP 2; ENABLED (E) / DISABLED (D)
- B16 = PRESENT STATUS OF P11 LOOP 3; ENABLED (E) / DISABLED (D)
- B19 = PRESENT STATUS OF P12 LOOP 4; ENABLED (E) / DISABLED (D)
- C10 = PRESENT STATUS OF P6 LOOP 1; LOOP 1 CLASS A (A) / CLASS B (B)
- C13 = PRESENT STATUS OF P7 LOOP 2; LOOP 2 CLASS A (A) / CLASS B (B)
- C16 = PRESENT STATUS OF P11 LOOP 3; LOOP 3 CLASS A (A) / CLASS B (B)
- C19 = PRESENT STATUS OF P12 LOOP 4; LOOP 4 CLASS A (A) / CLASS B (B)
- D9-10 = STATUS OF P6 LOOP 1; OK, NOT (OK)
- D12-13 = STATUS OF P7 LOOP 2; OK, NOT (OK)
- D15-16 = STATUS OF P11 LOOP 3; OK, NOT (OK)
- D18-19 = STATUS OF P12 LOOP 4; OK, NOT (OK)

DIAGNOSTIC SCREEN 3 (P555) Pressing F5 from DIAGNOSTICS 2 Menu enters DIAGNOSTICS 3 Menu

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
A	1	-	A	D	R		L	O	C		4	-	P	R	O	C	E	S	S		
B	2	-	A	D	R		D	A	T		5	-	M	O	R	E					
C	3	-	A	D	R		F	I	R		6	-	A	D	R		O	U	T		
D	S	E	L	E	C	T		F	U	N	C	T	I	O	N		K	E	Y		

F1	ADDRESS LOCATION (P5551)	F4	PROCESS (P5554)
F2	ADDRESS DATA (P5552)	F5	DIAGNOSTIC SCREEN 1(P5)
F3	ADDRESS FIRE (P5553)	F6	
ESC	DIAGNOSTICS (P)	ENT	
←		→	
# %		HLP	HELP (HL - P555)

ADDRESS LOCATION (P5551)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	X	-	Y	Y	Y	-	Y	Y	Y	/	Z	Z	Z		D	E	=	0	0	0
B	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
C																				
D																				

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	TURN ON LED	F5	
F3		F6	
ESC	DIAGNOSTICS 3 (P555)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
# %		HLP	HELP (HL - P5551)

- A1: = LOOP NUMBER OF DEVICES SHOWN
- A3-9 = STARTING ADDRESS / ENDING ADDRESS FOR DEVICES SHOWN IN
IN ROW C & D
- A11-13 = CURRENT DEVICE ADDRESS BEING POLLED
- A15-20 =EXTRA DELAY BETWEEN DEVICE POLL (000 = NO DELAY, DE x 10m SEC)
- C1-20 = DISPLAYS DEVICES CONFIGURED BETWEEN THE ADDRESSES NOTED IN
LOOP / ADDRESS (A1-9)
DENOTED BY: P = PHOTO O = SOM
I = ION S = SRM
UPPER CASE = ENABLED H = HEAT R = R2M
LOWER CASE = DISABLED F = FRCM * = INVALID OR MULTI DEVICES
- D1-20 = DISPLAY DEVICES FOUND BETWEEN THE ADDRESSES NOTED IN A1-9. PLACE
CURSOR ON ADDRESS. USE ENTER TO TOGGLE LED AT THAT ADDRESS OR IF F2
HAS BEEN PRESSED, 'L' INDICATES LED IS ON. PRESSING F2, WILL BLANK LINE D.
POSITION CURSOR WITH ARROWS UNTIL ON DESIRED ADDRESS. USE F1 & F4 KEYS
TO TOGGLE LED STATUS

ADDRESSABLE DATA (P5552)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	X	-	Y	Y	Y	/	X	X	X	-	Z	Z	Z	Z	=	0	0	0	0	D
B	A	0	0	0		N	0	0	0	-	Z	Z	Z	Z		M	0	0	0	
C	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7		C	0
D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	0	0	0	

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	LOOP POLL/ADDR. POLL	F5	
F3		F6	
ESC	DIAGNOSTICS 3 (P555)	ENT	
←		→	
# %	DATY ENTRY	HLP	HELP (HL - P5552)

- A1-5 = LOOP-ADDRESS OF DEVICE
- A7-9 = CURRENT ADDRESS OF DEVICE BEING POLLED (OR LOOP POLL BY PRESSING F2)
- A11-15 = TYPE OF DEVICE CONFIGURED AT THIS LOOP-ADDRESS (PHOTO, ION, HEAT, FRCM,
SOM, SRM, R2M)
- A17-19 = VALUE RETURNED FROM DEVICE AT THIS ADDRESS, LAST POLL
- A20 = ENABLE (E) / DISABLE (D) STATUS OF THIS LOOP-ADDRESS
- B2-4 = TOTAL NUMBER OF ACK'S RECEIVED BY DEVICE
- B7-9 = TOTAL NUMBER OF NACK'S RECEIVED BY DEVICE
- B11-15 = TYPE OF DEVICE FOUND AT THIS LOOP-ADDRESS (PHOTO, ION, HEAT, FRCM,
SOM, SRM, R2M)
- B18-20 = TOTAL NUMER OF RESPONSES FROM THIS DEVICE
- C20 = STATUS DISPLAYED IN D18-20:
0 - DEVICE MISSING COUNTS 2 - MULTIPLE DEVICES COUNTS
1 - INVALID RESPONSE/ CHECKSUM ERROR COUNTS 3 - INTERNAL FAULT COUNTS
4 - WRONG TYPE OF DEVICE COUNTS

- D1: 1 = LED IS ON 0 = LED IS OFF (PRESS F1 OR F4 TO TOGGLE LED STATUS)
D2: 1 = CONFIGURATION FAULT IN SOM TABLE 0 = NO FAULT (CHECKSUMS OK)
— = NOT APPLICABLE (NOT AN SOM)
D3: 0 = DEVICE IS PRESET 1 = NOT PRESET
D4 1 = DEVICE IN TROUBLE, COMMUNICATION CHECKSUM ERROR
D5 1 = MULTILE DEVICE TROUBLE PRESENT AT THIS ADDRESS
D6 1 = INTERNAL FAULT FROM 08 POLL COMMAND
D7 1 = WRONG DEVICE TYPE AT THIS ADDRESS
D8 1 = ANALOG DEVICE TROUBLE, CONTAMINATION 0 = NOT CONTAMINATED
— = NOT ANALOG DEVICE
D9 1 = ANALOG DEVICE IN TROUBLE, OUT OF RANGE TEST POINT 0 = TEST POINT OK
— = NOT ANALOG DEVICE
D10 Y= SRM / SOM ON FOR R2M: N = BOTH RELAYS OFF 1 = RELAY 1 ON
N= OUTPUT IS OFF 2 = RELAY 2 ON B = BOTH RELAYS ON
—=NOT AN OUTPUT DEVICE
D11: 1 = ANALOG DEVICE IN TROUBLE, CALIBRATION ERROR
1 = FRCM IN TROUBLE, CONFLICT BETWEEN CONTACT CONFIGURATION AND
 DEVICE RESPONSE
1 = SOM CONFIGURATION DOES NOT MATCH PANEL
1 = SRM CONFIGURATION DOES NOT MATCH PANEL
0 = NO CONFIGURATION FAULT
D12 N= FRCM/SOM/R2M/SRM SUPERVISED CIRCUIT IS NORMAL
S = FRCM/SOM/R2M/SRM SUPERVISED CIRCUIT HAS A SHORT
0 = FRCM/SOM/R2M/SRM SUPERVISED CIRCUIT HAS AN OPEN
— = NOT APPLICABLE (ANALOG DEVICE)

D13: 1 = ANALOG DEVICE LOADED WITH ALARM #1 SENSITIVITY LEVEL
 2 = ANALOG DEVICE LOADED WITH ALARM #2 SENSITIVITY LEVEL
 — = NOT ANALOG DEVICE
D14: 1 = DEVICE SELECTED FOR CONFIGURATION
 0 = NOT SELECTED
D15 1 = DEVICE SELECTED FOR CALIBRATION
 0 = NOT SELECTED
D16 3 = DEVICE (ANALOG OR FRCM) IN ALARM (ACTIVE)
 2 = ANALOG DEVICE IS IN PRE-ALARM, 2 STATE
 1 = ANALOG DEVICE IS IN PRE-ALARM, 1 STATE
 0 = DEVICE IS NORMAL (NOT ACTIVE)
 — = NOT AN INPUT DEVICE
D17 N= NO GROUND FAULT PRESENT
D18-D20 = (REFER TO C20)

SOM/R2M INDEX TEST (P5556B)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	X	-	Y	Y	Y	-	Z	Z	Z		I	D	X	:	X	X	/	Y	Y	Y
B	C	O	U	N	T	:	X	X	X		P	A	T	T	E	R	N	:	X	X
C	F	2		R	E	A	D				F	5		C	L	R		C	N	T
D	F	3		W	R	I	T	E			F	6		R	E	S		D	E	V

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	READ INDEX CNTR	F5	CLEAR INDEX CNTR
F3	WRITE INDEX CNTR	F6	SEND RESET COMMAND
ESC	RETURN (P5556A)	ENT	
←	MOVE CURSOR LEFT	→	MOVE CURSOR RIGHT
#'s	DATA ENTRY	HLP	HELP (HL - P5556B)

- A1-5 = LOOP - ADDRESS OF DEVICE
- A7-9 = TYPE OF DEVICE CONFIGURED @ ADDRESS LOCATION (SOM OR R2M)
- A15-16 = INDEX NUMBER TESTING
- A18-20 = CURRENT PATTERN OPERATING AT SOM (DOES NOT APPLY TO R2M)
- B7-9 = ZONE ACTIVATION COUNTER FOR THIS INDEX POSITION (A15-16)
- B19-20 = PATTERN FOR INDEX POSITION IN A15-16

DIAGNOSTIC SCREEN 4 (P5555)

Pressing F5 from DIAGNOSTICS 3 menu enters DIAGNOSTICS 4.

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	-	M	S	G		T	S	T		4	-									
B	-	O	U	T		C	H	K		5	-	M	O	R	E					
C	-	S	Y	S		P	W	R		6	-									
D	S	E	L	E	C	T		F	U	N	C	T	I	O	N		K	E	Y	

F1	MESSAGE TEST (P55551)	F4	
F2	OUT CFG TST (P55552)	F5	DIAGN 1 (P5)
F3	SYS PWR (P55553)	F6	
ESC		ENT	
←		→	
#'s		HLP	HELP (HL - P5555)

MESSAGE TEST (P55551)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	Z	O	N	E	-	S	T	A	T	E	:	X	X	X	-	Z	Z	Z	Z	
B	T	E	S	T		I	N	T	E	R	V	A	L	:	Y	Y	Y	S		
C	N	U	M	B	E	R		O	F		T	E	S	T	S	:	X	X	X	
D	P	R	E	S	S		E	N	T	E	R		T	O		S	T	A	R	T

F1	DECR. FIELD @ CURSOR	F4	INCR. FIELD @ CURSOR
F2	PAUSE TEST	F5	PAUSE TEST
F3	PAUSE TEST	F6	PAUSE TEST
ESC	DIAG 4 (P5555)	ENT	START TEST
←	LEFT	→	RIGHT
#'s	DATA ENTRY	HLP	HELP (HL - P55551)

Password level 4 access only. See Chapter 12.

OUTPUT CONFIGURATION TEST (P55552)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	P	R	E	S	S		E	N	T	E	R		T	O		T	E	S	T	
B	O	U	T	P	U	T		C	O	N	F	I	G	U	R	A	T	I	O	N
C	1	-	X	X	X	-	Y	Y	Y		Z	-	X	X	X	-	Y	Y	Y	
D	3	-	X	X	X	-	Y	Y	Y		4	-	X	X	X	-	Y	Y	Y	

F1		F4	
F2		F5	
F3		F6	
ESC	DIAG. 4 (P5555)	ENT	START TEST
←		→	
#'s		HLP	HELP (HL - P55552)

- C3-5 = TOTAL NUMBER OF OUTPUTS WHICH WILL BE VERIFIED FOR LOOP 1
- C7-9 = CURRENT ADDRESS BEING POLLED ON LOOP 1
- C13-15 = TOTAL NUMBER OF OUTPUTS WHICH WILL BE VERIFIED FOR LOOP 2
- C17-19 = CURRENT ADDRESS BEING POLLED ON LOOP 2
- D3-5 = TOTAL NUMBER OF OUTPUTS WHICH WILL BE VERIFIED FOR LOOP 3
- D7-9 = CURRENT ADDRESS BEING POLLED ON LOOP 3
- D13-15 = TOTAL NUMBER OF OUTPUTS WHICH WILL BE VERIFIED FOR LOOP 4
- D17-19 = CURRENT ADDRESS BEING POLLED ON LOOP 4

SYSTEM POWER (P55553)

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
A	S	Y	S	T	E	M		P	O	W	E	R	:	X	X	X				
B	L	O	W	E	R		L	I	M	I	T	:		0	9	5				
C	U	P	P	E	R		L	I	M	I	T	:		1	0	4				
D	S	T	A	T	U	S	:	O	K											

F1		F4	
F2		F5	
F3		F6	
ESC	DIAG. 4 (P5555)	ENT	
←		→	
#'s		HLP	HELP (HL - P55553)