



- NOTES:**
- CONNECT THE TWO SSCD CURRENT SENSORS WITH A #18 AWG CONDUCTOR.
 - REMOVE THE CONNECTION FROM DRIVER NO.1 (TERM #1) TO OSCILLATOR (TERM #10) AND THE CONNECTION FROM DRIVER NO. 2 (TERM #1) TO POWER MODULE (TERM #8). THEN RECONNECT THEM USING THE PURPLE WIRES FROM THE SSCD₂ AS SHOWN.
 - ENSURE JUMPER J1 ON THE INTERFACE CARD IS IN POSITION 3 FOR NORMALLY OPEN CONTACT, AND JUMPER J2 IS IN POSITION 1 FOR NORMALLY CLOSED CONTACT (FACTORY SET). SEE INTERFACE CARD DIAGRAM, TECH MANUAL, NOV 97. SIGNAL SOUNDS WHEN K1 IS OPEN.
 - CONNECT THE TWO 1N4001 DIODES TO THE DIODE TERMINAL BLOCK LABELED TB1 AS SHOWN AT PINS 4, 5, AND 6; ALSO INSTALL ONE 1N4001 BACK-EMF DIODE ACROSS SOLID STATE RELAY S1 OUTPUT TERMINALS TO PROTECT IT FROM HIGH VOLTAGE SPIKES FROM INDUCTIVE LOAD OF THE SOUND SIGNAL.
 - THIS SYSTEM SHOULD BE TEMPORARILY ASSEMBLED AND TEST-OPERATED SUCCESSFULLY AT THE BASE PRIOR TO TRANSPORTING TO THE AID FOR PERMANENT INSTALLATION.
 - SACII'S MUST OPERATE WITH SW1 IN POSITION 1.
 - IF A SINGLE HORN (FA-232/SA-850) IS USED, THE SWITCHING THRESHOLD OF SACII S1 WILL HAVE TO BE ADJUSTED AS THE LOAD CURRENT MAY NOT BE HIGH ENOUGH TO KEEP IT FROM TIMING OUT. ADJUST VARIABLE RESISTOR R4, LOCATED UNDER THE LABEL NEAR THE WORD "LAMPCHANGER", CLOCKWISE 20 TURNS OR UNTIL FAINT CLICKS ARE HEARD. STICK A LABEL "SET TO ZERO AMP" ON THE SACII AFTER THE ADJUSTMENT.
 - ATTACH WIRE COMING FROM ARM TB1-3 TO SACII S1 TB1-6.
 - REFER TO DWG 140410, REV.E FOR OLDER VERSIONS OF SDBs.
 - THE SCHOTTKY DIODE ISOLATES THE VM100 FOG DETECTOR FROM THE SACII THUS PREVENTING THE VM100 FROM INADVERTENTLY KEEPING THE SYSTEM IN A CONTINUOUS STATE OF RESET. SEE LEACMS FIELD CHANGE #3 FOR DETAILS.
 - REMOVE THESE OPTO 22 ODCS MODULES AND REPLACE WITH OPTO 22 ODCSR MODULES, ALLIED ELECTRONICS, INC. PART #691-0071. THESE NEW OPTO MODULES PROVIDE DRY CONTACT CLOSURES WHICH GIVE DIRECT CONNECTIONS TO THE SYSTEM GROUND. SEE LEACMS FIELD CHANGE #3 FOR DETAILS.

A	10/99	HRC	CORRECT THE R2 CONNECTIONS IN THE VM100. ADD FIELD CHANGE #21 TO SOLVE THE VM100/SACII/LEACMS RESET PROBLEM. CHANGE INPUT LEADS TO VM100 FROM 12AWG TO 18AWG.	STN
REV.	DATE	APPR.	DESCRIPTION	BY
DESIGNED:	STN		U.S. COAST GUARD HEADQUARTERS CIVIL ENGINEERING	
DRAWN:	STN			
TRACED:			STANDARD AID TO NAVIGATION SOLAR CAT I AND I I LIGHTHOUSE FOG DETECTOR AND SOUND SIGNAL INTERCONNECTION	
CHECKED:	JTG/RA			
REVIEWED BY:	H.R. CLEVELAND			
	G-SEC-2A			
REVIEWED BY:	J.A. KAYSER			
	G-SCE-2			
REVIEWED BY:	L.E. JAEGER	APPROVED:	CAPT. J.A. RAUCH	DATE 2-5-97
	G-SEC-2		CHIEF, OFFICE OF CIVIL ENGINEERING	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. TOLERANCES: DIM. ANG.				
			DRAWING NUMBER 1 4 0 4 1 1	REV. A
PLOTING SCALE:			SCALE: NONE	SHEET 1 OF 2

POINT TO POINT WIRE RUNNING LIST

FROM	WIRE SIZE (AWG)	MAX DISTANCE (FT)	TO
SDB, PIN 3(+)	10	40	MAIN SOUND SIGNAL(+)
SDB, PIN 3(-)	10	6	SAC II S1, TB2-2
MAIN SOUND SIGNAL(-)	10	40	SAC II S1, TB2-1
SDB, PIN 5(+)	10	80	LEACMS, 1J1, PIN A VIA 1P1
SDB, PIN 5(-)	10	80	LEACMS, 1J1, PIN B VIA 1P1
SDB, PIN 8(+)	12	30	EMERGENCY SOUND SIGNAL(+)
SDB, PIN 8(-)	12	2	SOLID STATE RELAY S1, PIN 1
EMERGENCY SOUND SIGNAL(-)	12	30	SOLID STATE RELAY S1, PIN 2
SDB, PIN 9(+)	18		SAC II S1, TB1-1
SAC II S1, TB1-1	18		SOLID STATE RELAY S1, PIN 3
SAC II S1, TB1-10	18		SDB, DIODE TERMINAL BLOCK, TBS1-2
SDB, DIODE TERMINAL BLOCK, TBS1-1	18		SOLID STATE RELAY S1, PIN 4
SDB, ARM, TB1-3	18		SAC II S1, TB1-6
SAC II S1, TB1-8	18		LEACMS, 1J4, PIN D VIA 1P4
SAC II S1, TB1-7	18		LEACMS, 1J4, PIN E VIA 1P4
SDB, DIODE TERMINAL BLOCK, TBS1-3	18		LEACMS, 1J4, PIN F VIA 1P4
SDB, A/V RST (5)	18		LEACMS, 1J4, PIN K VIA 1P4
SAC II S1, TB1-5	18		LEACMS, 1J4, PIN L VIA 1P4
SDB, PIN 7(+)	18		FOG DETECTOR, R3-2, VIA P3
SDB, PIN 7(-)	18		FOG DETECTOR, R3-1, VIA P3
SAC II S1, TB1-2	18		SACD #1
SAC II S1, TB1-4	18		SACD #2
FOG DETECTOR, R2-2, VIA P2	18		SAC II S1, TB1-5
FOG DETECTOR, R2-3, VIA P2	18		SAC II S1, TB2-2
FOG DETECTOR, R2-4, VIA P2	18		SAC II S1, TB2-2
FOG DETECTOR, R1-4, VIA P1	18		LEACMS, 1J3, PIN B, VIA 1P3
FOG DETECTOR, R1-1, VIA P1	18		LEACMS, 1J3, PIN D, VIA 1P3
LEACMS, 1J3, PIN D, VIA 1P3	18		LEACMS, OPTO BRD, 1A2TB2-26

MAXIMUM DISTANCES SHOWN ABOVE ARE BASED ON THE CONFIGURATION SHOWN ON DWG 140410.
CONSULT WITH THE WIRING SIZING GUIDE (G-SEC-2) WHEN CONFIGURATION IS DIFFERENT.

BILL OF MATERIALS

ITEM	TYPE	SOURCE OF SUPPLY	QUANTITY
SOLAR DISTRIBUTION BOX	SDB	G-SEC	1
SOLAR AID CONTROLLER II	SAC II	G-SEC	1
SOUND SIGNAL	FA-232/02	AUTOMATIC POWER, INC.	1
EMERGENCY SOUND SIGNAL	FA-232	AUTOMATIC POWER, INC.	1
SOLID-STATE RELAY 12 AMP, NORMALLY OPEN	MODEL D1D12	CRYDOM OR EQUIVALENT	1
FOG DETECTOR	VM100	G-SEC	1
SOUND SIGNAL CURRENT DETECTOR	SACD	G-SEC	2
LEACMS ASSEMBLY	GCF-W-1221-LEACMS	G-SEC	1
DIODE	1N4001	COMMERCIAL	3
DIODE (PART OF FC #3 TO LEACMS)	MBR1045	COMMERCIAL	1

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	G-SEC-2A	INTERCONNECTION		
REVIEWED BY:	J.A. KAYSER			
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REVIEWED BY:	L.E. JAEGER	APPROVED:	CAPT. J.A. RAUCH	DATE 2-5-97
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SCALE: NONE		SHEET 2 OF 2		