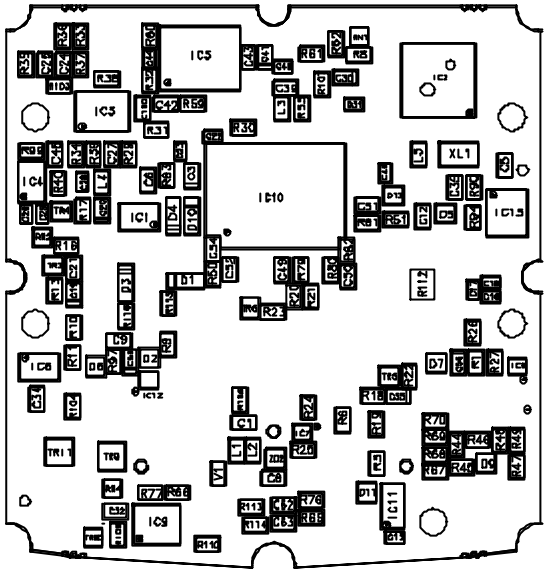
USED ON 4376-XXX

NOTES :-

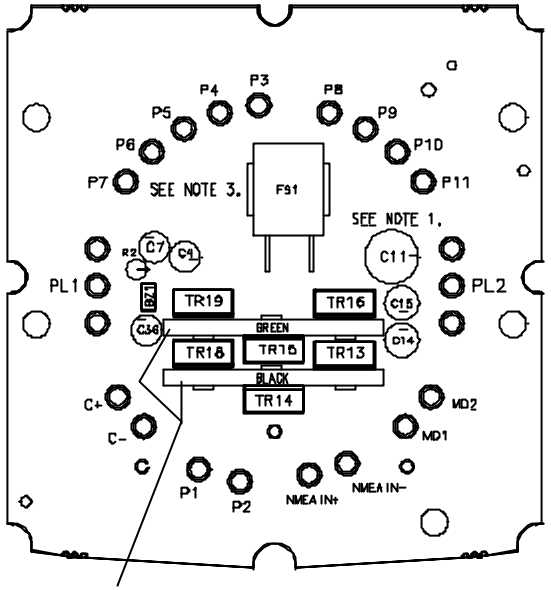
1. IMPORTANT - BASE OF C11 TO BE MOUNTED FLAT AGAINST THE PCB TO PREVENT CLASHING WITH BACK COVER, AND SECURED WITH RTV.
2. HEATSINKS ARE COLOUR CODED GREEN AND BLACK.
3. FUSE FS1 IS MOUNTED FLAT ACROSS THE LCD DRIVER IC10 AND SECURED USING A DOUBLE SIDED ADHESIVE PAD [ITEM 68].
   " THE FUSE SHOULD BE PRE-FORMED BEFORE SOLDERING. "
4. PLACE DIFFUSER FLAT ON THE CONVENTIONAL NON-COMPONENT SIDE OF THE PCB INSERT LEDS 17-22 OFF THE BOARD AND SOLDER IN POSITION REMOVE DIFFUSER
5. THE PINS OF SW8 ARE TO BE CROPPED SHORT.

LINE INDICATES GREEN STRIP ON LED.

SURFACE MOUNT COMPONENT SIDE

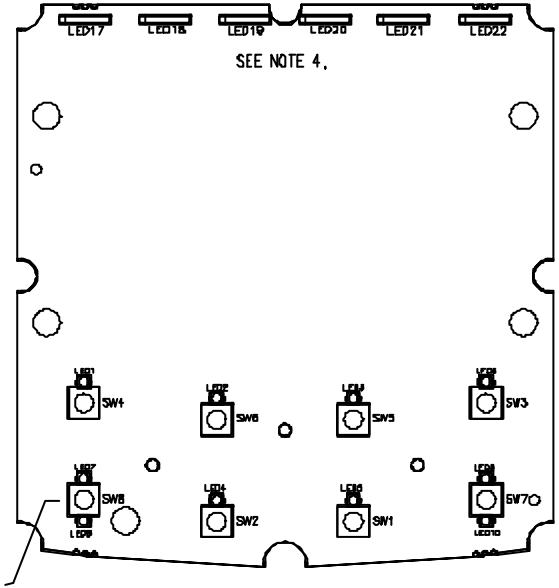


CONVENTIONAL COMPONENT SIDE



SEE NOTE 2.

CONVENTIONAL NON-COMPONENT SIDE



SEE NOTE 5.

CONVENTIONAL NON-COMPONENT SIDE

72	15185	11	LED 202.	LED17-22,(23-26)
71	02600	15	LED HLMP2685	LED1-4
70	02576	4	LED HLMP2182	LED7-10
69	06930	8	SWITCHES ALPM11	SW1-8

CONVENTIONAL COMPONENT SIDE

68	3036-141	2	HEATSINK	
67	10277	5	INSULATOR KOOL PAD	
66	10014	5	INSULATING BUSH	
65	28008	6	RIVSCREW	
64	15047	1	PAD DOUBLE SIDED ADHESIVE	NOTE 3.
63	3030-035-8	23	SOLDER BUCKETS	PL1,2,P1-11,MD1,2,C+,C-,NMEA IN-,NMEA IN+
62	10286	1	FUSE 8A POLY	FS1 NOTE 3.
61	07286	1	HEADER MOLEX 2WAY	BZ1
60	03074	1	CAPACITOR ELEC 100uF 16V +/-20%	C36
59	03062	1	CAPACITOR ELEC 100uF 6V3 20%	C7
58	03050	2	CAPACITOR ELEC 1nF 63V 20%	C14,15
57	03069	1	CAPACITOR ELEC 470uF 35V 20%	C11 NOTE 1.
56	03100	1	CAPACITOR ELEC LOW IMP 100uF 25V 20%	C4
55	05040	5	TRANSISTOR FET IRFZ44N 60V TO220	TR13-16,18
54	05048	1	TRANSISTOR BUZ71	TR19
53	01183	1	RESISTOR 13R 5% 0.4W ERF25	R2
1	3115-152	1	PCB ST60 ST4/5000 CONTROL UNIT AND AUTOPILOT	

PARTS LIST

ISSUE	DESCRIPTION OF CHANGE	DATE
T	REMOVE SURFACE MOUNT COMPONENT ITEMS LIST ADDED NOTE 6	18 05 98
S	CHANGE L2 TO NO FIT OPTION, L3 TO 0R33/2W ADD WIRE LINK 6, NOTE 7	14,27,98
R	ITEM 74 (R6 R7) 3K3 RESISTOR & NOTE 6 ADDED ADD 100 OHM ALTERNATIVE ITEM 45	13,26,98
P	ITEM 6, 8, 11 ITEM 75 (R8,R9) ADDED MAKE ITEM 6, 8, 11 [ITEM 13] NOW PN 5 FT.	03 10 97
N	ITEM 44 (IC6) WAS BARRELJACK	13 08 97
M	CHANGE R68 TO 82 1%	27,28,97
L	CHANGE ITEM 80 100uF TO 1000uF & LCD PART NUMBER ADD74	26 08 97
K	ADD NOTE 3 AND AMEND NOTE 1	11 08 97
J	REPLACE R7 180R WITH 470R DELETE D21 CHANGE R4 TO 10 FIT 63, DELETE	08 08 97
H	ADD VALUE 100R TO R615 CHANGE R86 470R TO 390R,R711 R48 TO 82R.	21,28,97
G	ADD R715-717,720,721 DELETE LED1-4 ADD 4 SCHMITT INVERTERS CHANGE R711 TO 8K2 FIT 10K TO 68R, R5 FIT 100R TO PCB 3036-132 ISSUE C	14,12,98
F	ADD R7 100R, PART NO. 10288 R8 FIT, ADD 10uF/16V RADIAL CAP PART NO. 07288 NOTE 3 CHANGE PART NO. ON R711 TO 07288 NOTE 3	28,11,98
E	ADD FIT JUMPER WIRE LINK, CHANGE R68 TO 470R,FIT 3A TO R6,R7 10V TO 6V3,CHANGE TRIAC TO 10A, DELETE R28	28,11,98
D	ADD PART NO. IN TRIAC,R4/5/6/7 2. CHANGE C4 1.5" TO 0.41", R8,10R TO 15K,TO 180K, R87 100K TO 180K 180K-33K DP TO 1P	28 10 98
C	ADD R715 180K,R705,718 10K,R707 33K,C20 10uF 16V R/A,R 1/2 ADD R719 82K1, CHANGE ADD R7 10-24 82K TO 2K7 R5 10K TO 100R,R6 10 TO 180,R7 1K TO 180,R8 100R TO 10K,DELETE TR2, R7 TO R6,R8 TO R7	09,10,98
B	CHANGE LED1-16 TO NO FIT OPTION, DELETE LED17, ADD HEATSINK ASSEMBLY.	01 10 98
A	FIRST ISSUE	09/03/98
ISS	DESCRIPTION OF CHANGE	DATE

Autohelm

THE INFORMATION CONTAINED HEREIN SHALL NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE PRIOR WRITTEN PERMISSION OF AUTOHELM

TOLERANCES UNLESS OTHERWISE STATED: X ±0.5, .X ±0.25, .XX ±0.10, ANGLES ±1°. DIMENSIONS IN MM

DRAWN TO BS308 DO NOT SCALE - IF IN DOUBT ASK

MATERIAL: XXXXXXXX

FINISH: XXXXXXX

SCALE 2.25:1

Not Frozen

TITLE: ST60 ST4/5000 PLUS AUTOPILOT

DRAWING No. 4376-001

ISSUE A1