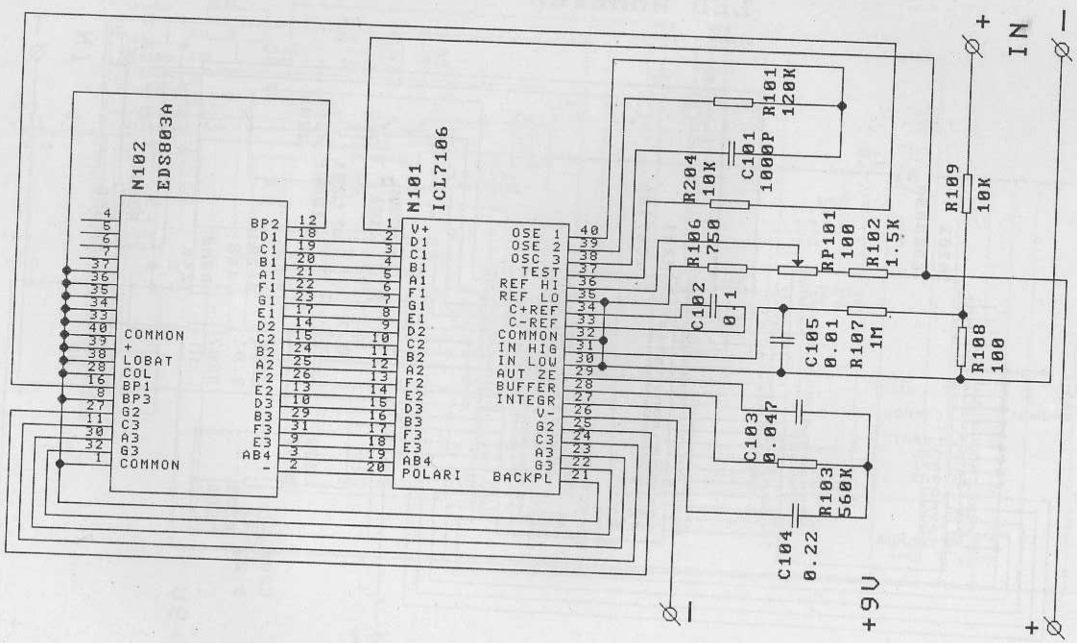
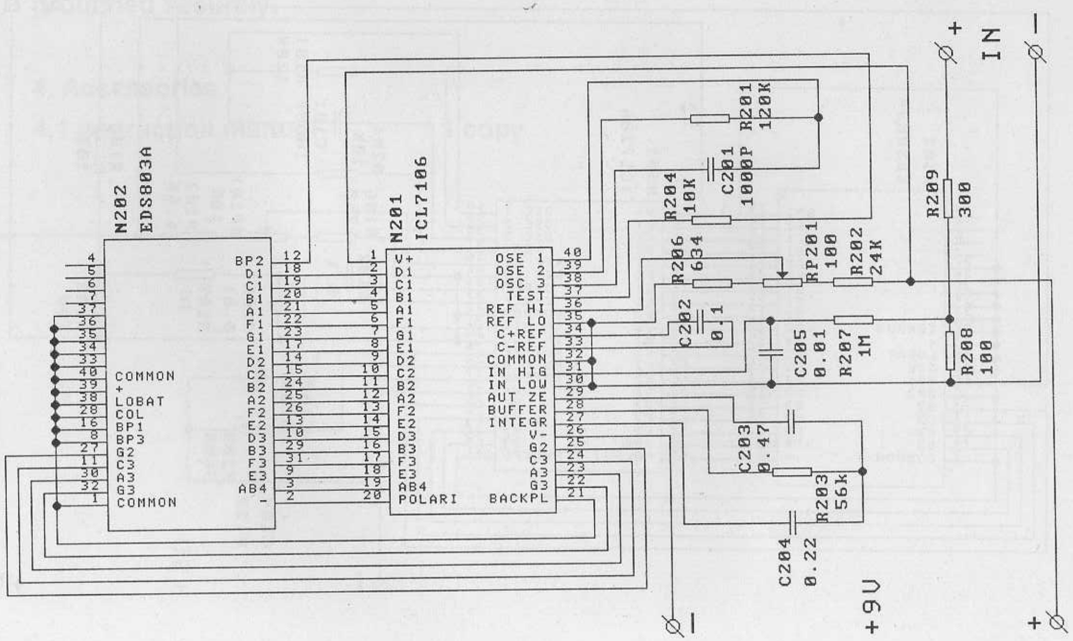
inal of power cord must be

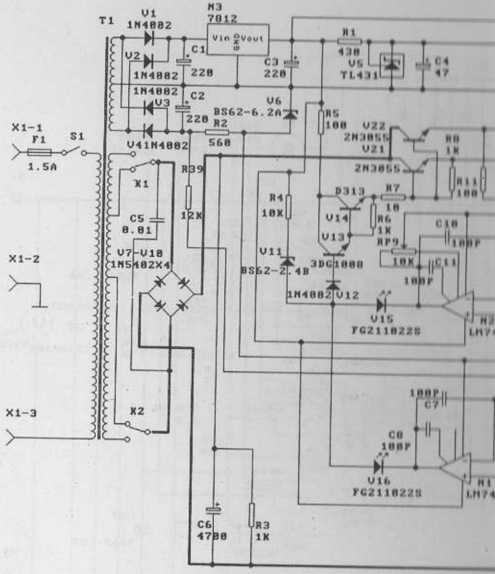
LED VOLTMETER



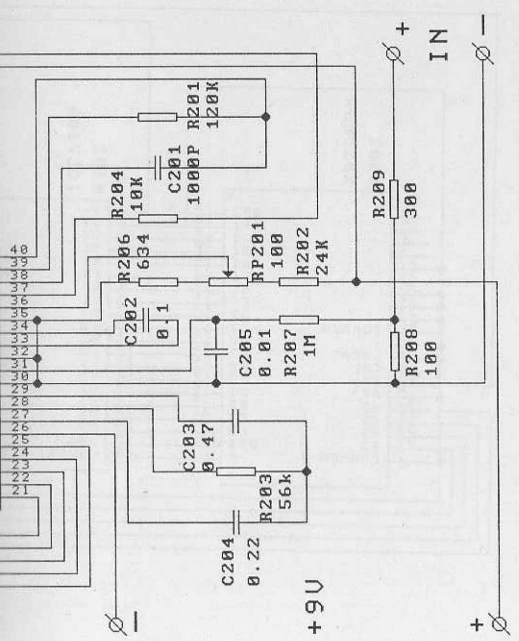
LED AMMETER

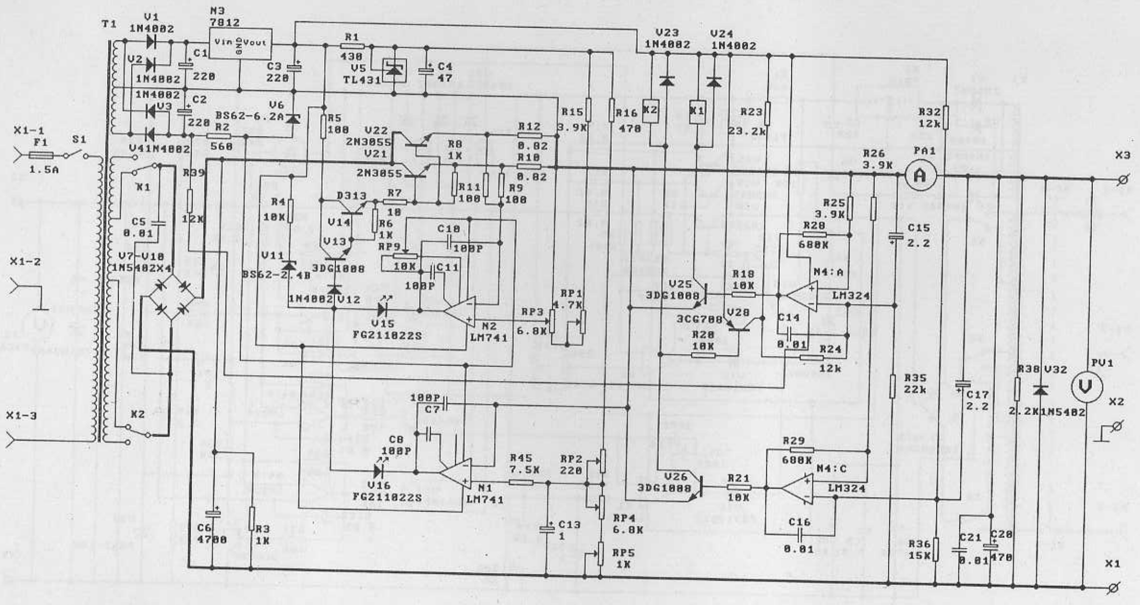


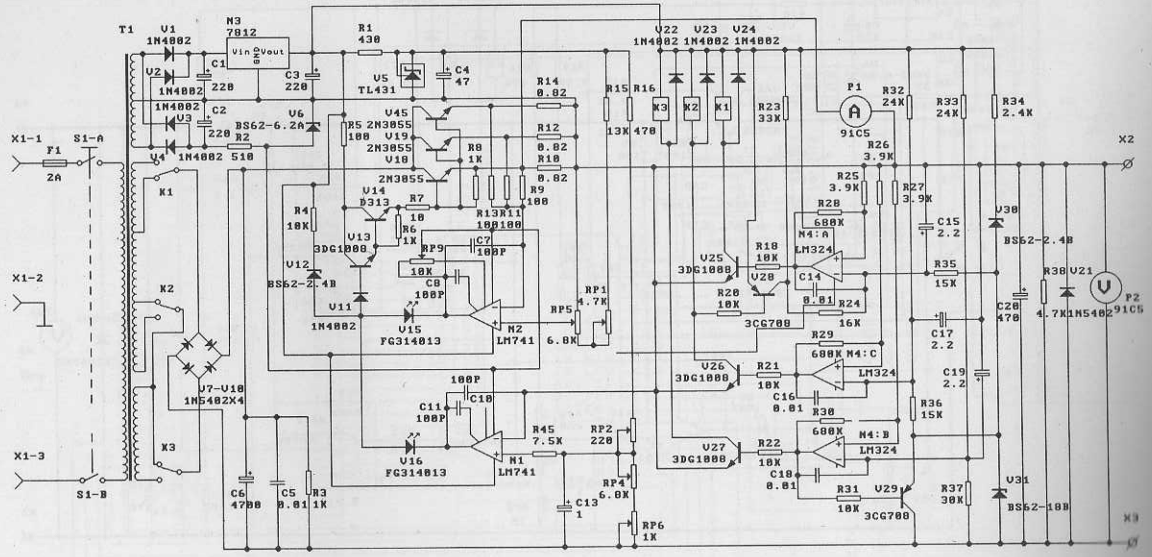
N202
EDS803A
N201
ICL7106
COMMON
+
LOBAT
COL
BP1
BP3
G2
C3
A3
G3
COMMON
BP2
D1
C1
B1
A1
F1
G1
E1
D2
C2
B2
A2
F2
E2
D3
B3
F3
E3
AB4
-
V+
POLARI
OSE 1
OSE 2
OSC 3
TEST
REF HI
REF LO
C+REF
C-REF
COMMON
IN HIG
IN LOU
AUT ZE
BUFFER
INTEGR
V-
G2
C3
A3
G3
BACKPL
R201
120K
C201
1000P
R204
10K
R206
634
RP201
100
R202
24K
C202
0.1
C205
0.01
R207
1M
R209
300
R208
100
C203
0.47
R203
56k
C204
0.22
+9V
+
IN
-
-
+



T1
V1
1N4002
V2
1N4002
1N4002
V3
V4 1N4002
N3
7812
Vin
Vout
C1
220
C2
220
C3
220
R1
430
V5
TL431
C4
47
V6
BS62-6.2A
R2
560
R5
100
V22
2N3055
V21
2N3055
R8
1K
R11
100
X1-1
F1
1.5A
S1
X1-2
X1-3
X1
X2
C5
0.01
V7-V10
1N5402X4
R39
12K
R4
10K
D313
V14
V13
R7
10
R6
1K
RP9
10K
C10
100P
C11
V11
BS62-2.4B
3DG1000
1N4002
V12
V15
FG211022S
100P
C7
C8
100P
V16
FG211022S
C6
4700
R3
1K
LM7


IN
+
−
R209
300
R201
120K
C201
1000P
R204
10K
R206
634
RP201
100
R202
24K
C202
0.1
C205
0.01
R207
1M
R208
100
C203
0.47
R203
56k
C204
0.22
+9V
−
+
40
39
38
37
36
35
34
33
32
31
30
29
28
27
26
25
24
23
22
21


T1
V1
1N4002
M3
7812
Vin GND Vout
C1
220
V2
1N4002
C3
220
R1
430
V5
TL431
C4
47
V23
1N4002
V24
1N4002
V3
1N4002
C2
220
V6
BS62-6.2A
V4 1N4002
R2
560
R5
100
V22
2N3055
V21
2N3055
R8
1K
R12
0.02
R10
0.02
R15
3.9K
R16
470
K2
K1
R23
23.2k
R32
12k
X1-1
F1
1.5A
S1
K1
R39
12K
C5
0.01
V7-V10
1N5402X4
R4
10K
D313
V14
V13
R7
10
R6
1K
RP9
10K
R11
100
R9
100
C10
100P
C11
100P
V11
BS62-2.4B
3DG1000
1N4002 V12
V15
FG211022S
N2
LM741
RP3
6.8K
RP1
4.7K
R26
3.9K
PA1
A
X3
R25
3.9K
R28
680K
C15
2.2
V25
3DG1000
R18
10K
N4:A
LM324
3CG700
V20
C14
0.01
R20
10K
R24
12k
R35
22k
C17
2.2
R38
2.2K
V32
1N5402
PV1
V
X2
X1-2
X1-3
K2
C7
100P
C8
100P
V16
FG211022S
N1
LM741
R45
7.5K
RP2
220
R29
680K
N4:C
LM324
V26
3DG1000
R21
10K
C6
4700
R3
1K
C13
1
RP4
6.8K
RP5
1K
C16
0.01
R36
15K
C21
0.01
C20
470
X1



T1
V1 1N4002
V2 1N4002
1N4002
V3
V4 1N4002
C1 220
C2 220
N3 7812
Vin Vout
C3 220
R1 430
V5 TL431
C4 47
V6 BS62-6.2A
R2 510
R5 100
V45 2N3055
V19 2N3055
V18
2N3055
R14 0.02
R12 0.02
R10 0.02
R8 1K
R9 100
R13 R11 100 100
V14 D313
R7 10
R6 1K
V13 3DG1000
R4 10K
V12 BS62-2.4B
V11 1N4002
RP9 10K
C7 100P
C8 100P
V15 FG314013
N2 LM741
RP5 6.8K
RP1 4.7K
X1-1
F1 2A
S1-A
K1
X1-2
K2
V7-V10 1N5402X4
X1-3
S1-B
K3
C6 4700
C5 0.01
R3 1K
C11 100P
C10 100P
V16 FG314013
N1 LM741
R45 7.5K
RP2 220
RP4 6.8K
C13 1
RP6 1K
R15 13K
R16 470
X3 X2 X1
V22 1N4002
V23 1N4002
V24 1N4002
R23 33K
P1 A 91C5
R32 24K
R33 24K
R34 2.4K
X2
R26 3.9K
R25 3.9K
R27 3.9K
R28 680K
M4:A LM324
R18 10K
V25 3DG1000
V28 3CG700
R20 10K
C14 0.01
R24 16K
C15 2.2
R35 15K
V30 BS62-2.4B
R38 4.7K
V21 1N5402
V P2 91C5
C20 470
C17 2.2
R29 680K
M4:C LM324
V26 3DG1000
R21 10K
C16 0.01
C19 2.2
R36 15K
R30 680K
M4:B LM324
V27 3DG1000
R22 10K
C18 0.01
R31 10K
V29 3CG700
R37 30K
V31 BS62-18B
X3