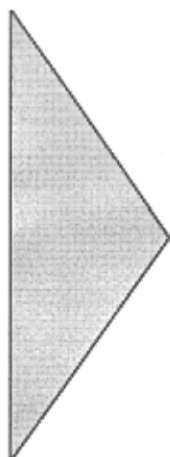


1500

3000

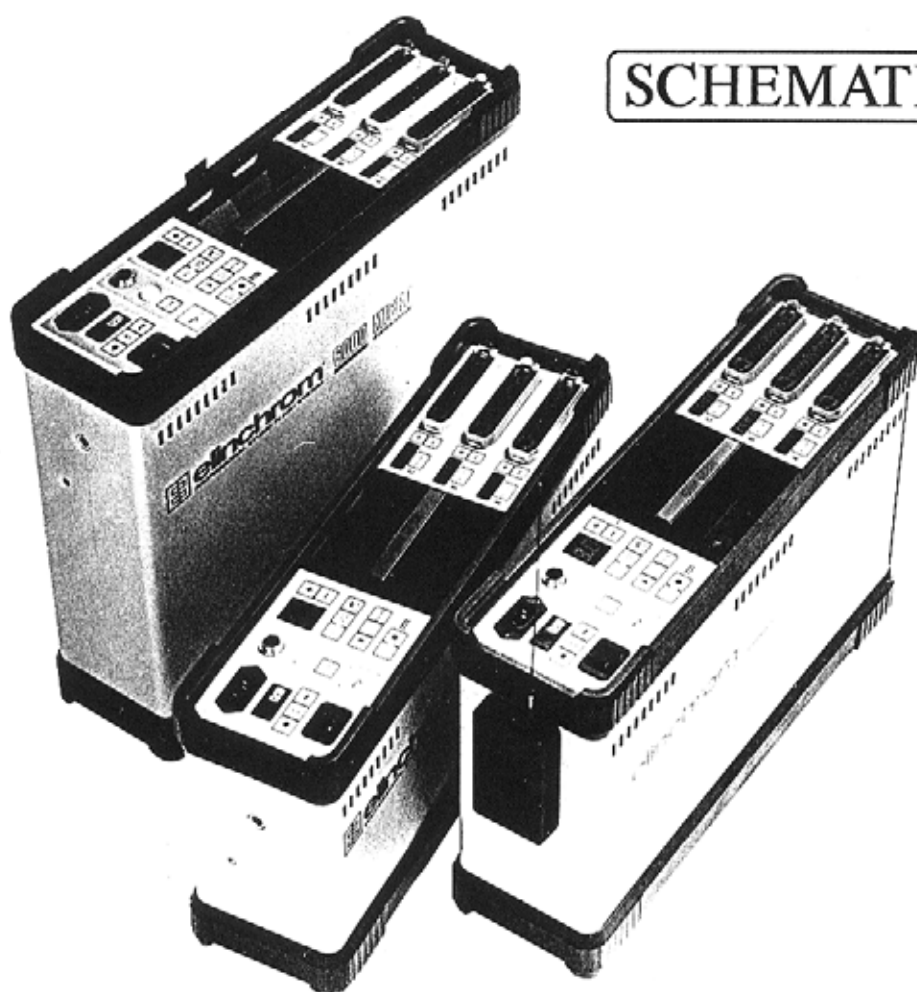
6000



MICRO AS

SCHEMATIC DIAGRAMS

110 V VERSION



elinca sa

CH-1020 RENENS
Switzerland

Tél : 021/634 26 77
Tlx : 455139 ELIN CH
Fax : 021/634 26 81

IMPORTANT ! The interior of the generator or compact contain components carrying dangerous levels of electric charge, even though the unit has been disconnected from the mains.

ALWAYS TAKE THE FOLLOWING PRECAUTIONS:

1. Always disconnect it from the mains supply, and discharge the unit before (for generator) and after (for compact) removing the outer cover or housing. This is best achieved with a suitable discharge resistor (code 11931 for 220 V) and (11930 for 110 V) fitted to a lamphead plug which may be inserted into a lamphead outlet for generator only.
For compact connect the discharge resistor in the flash tube terminals.
2. Take care when opening a generator. Always start by connecting a voltmeter across the storage capacitors, as capacitor drainage may not have occurred due to a fault in the unit.



ACHTUNG GEFAHR !

Auch wenn der Generator vom Netz getrennt ist, können im Innern des Geräts noch gefährliche elektrische Spannungen vorhanden sein.

ACHTUNG GEFAEHRliche STROMSPANNUNG:

1. Bevor Sie ein Blitzgerät öffnen, entladen Sie zuerst die Kondensatoren mittels Entladewiderstand (Best, Nr. 11931 für 220 V)
2. Vorsicht beim Öffnen eines Blitzgeräts. Verbinden Sie sofort ein Voltmeter mit den Kondensatoren, denn diese könnten wegen einer anderen Panne nicht entladen sein.

ATTENTION DANGER !

Des tensions électriques dangereuses restent présentes, ceci même lorsque l'appareil est déconnecté du secteur.

PRUDENCE LORS DE L'OUVERTURE D'UN GENERATEUR OU COMPACT.

1. Déconnecter l'appareil du réseau et avant de procéder à son ouverture décharger le générateur au moyen du dispositif de décharge (code 11931 pour 220 V) et (11930 pour 110 V).
Pour les compacts retirer la poignée et la chemise métallique et procéder à la décharge en connectant le dispositif aux bornes du tube flash.
2. Commencer par vérifier la tension aux bornes des condensateurs. Leur drainage peut ne pas avoir eu lieu, la rupture d'un élément ou d'un conducteur peut en être la cause.

Input current limiter

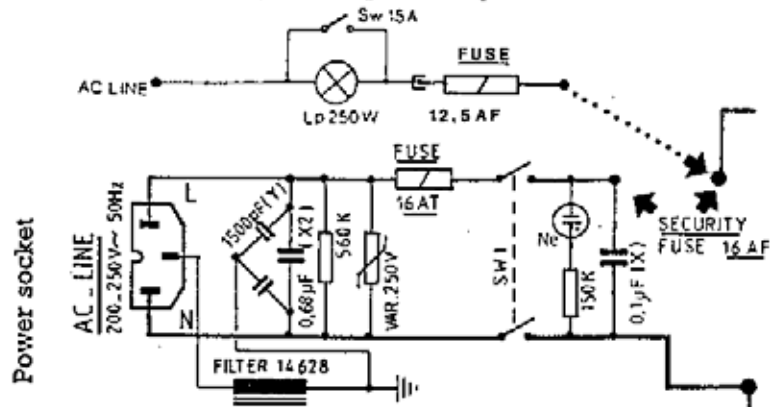
This device limits the current that the unit may draw from the mains supply to around 1 ampere. This prevents damage due to short-circuits, slows down recharging and improves the voltage stabilisation.

With experience, the activity of the limiter lamp can give many clues regarding malfunctions in the unit.

1500 MICRO

3000 MICRO

6000 MICRO



Limitateur du courant d'entrée

Il limite le courant à 1 ampère pour secteur 220V et 2 ampères pour secteur 110V.

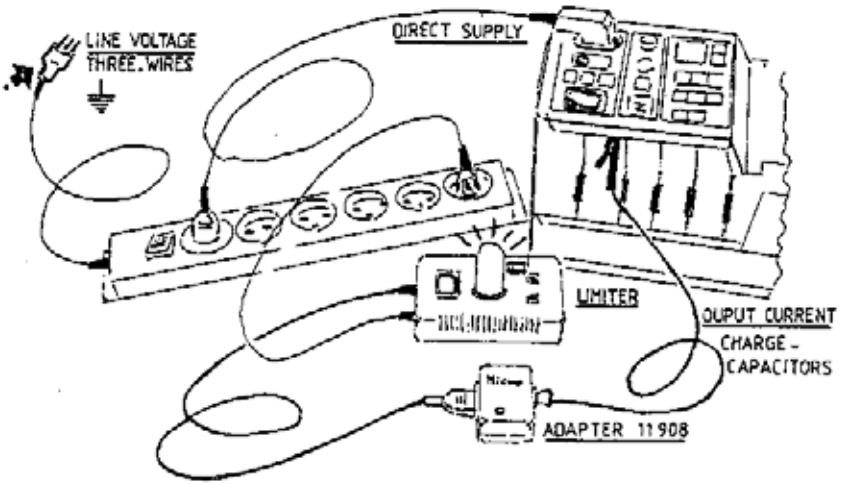
Utile en cas de court-circuit dans la partie d'alimentation des circuits électroniques.

La restriction de courant qu'il produit augmente le temps de charge et améliore la stabilisation, ce qui est apprécié lors du contrôle et des ajustements.

L'OBSERVATION DE L'ETAT DE BRILLANCE DE LA LAMPE FOURNIRA DE BONNES INDICATIONS POUR LE DEPISTAGE DES DEFAILLANCES

USE

Fehlerstrom-Schutzschalter
Fault current protective switches
Interrupteurs-protecteurs de défaut de courant
Interruptores-protectores de defecto de corriente
Interruttori di protezione per difetti della corrente elettrica



Netzstrom-Begrenzungs-vorrichtung

Diese Anordnung begrenzt den an das Gerät angeschlossenen Netzstrom auf 1 A bei Netzspannung 220 V bzw. 2 A bei einem Netz 110 V.

Sie ist eine nützliche Schutzmassnahme, falls in der Stromversorgung der Elektroniksaltungen ein Kurzschluss vorliegt.

Die Strombegrenzung erhöht die Ladezeit und ergibt eine bessere Stabilisierung, die auch die Kontrolle dieser Einstellungen erleichtert.

DIE BEOBSACHTUNG DER LAMPENHELLIGKEIT IST OFT EINE GUTE ANZEIGE BEI DER FEHLERSUCHE.

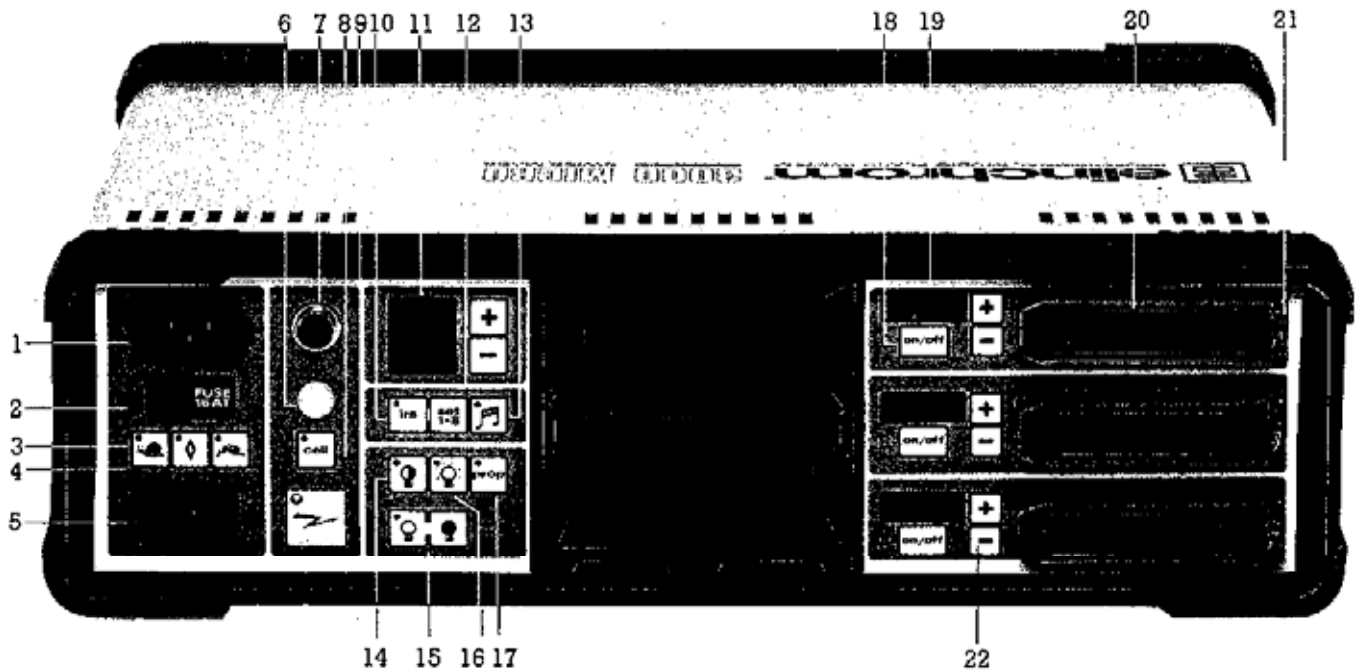
1500 * 3000 * 6000 MICRO AS
INITIAL KIT FOR REPAIR. 110V VERSION : ORDER 14876

PARTS No	DESCRIPTION	QTY	UNIT PRICE	TOTAL PRICE
630.501	Control panel (complete)	1	656.-	656.-
103.068	Left hand keypad	1	153.-	153.-
103.069	Right hand keypad	1	95.-	95.-
14870	Board micro PB1	2	225.-	450.-
14879	Set EPROM assymetrical (for 14870)	1x1500.3000.6000	105.-	105.-
14871	Board converter PB2 (see instruction)	2	128.-	128.-
14849	Board Sync-Dimmers PB3	1	85.-	85.-
14859	Board Triggers-Boosters PB4	1	55.-	55.-
14882	Board Discharge- overvoltage PB5	1	70.-	70.-
14869	Motherboard PB6	1	258.-	258.-
14852	Power display with insulating 207040	1	75.-	75.-
14853	Outlet display with insulating	1	110.-	110.-
14812A	Board lamphead sockets (without element)	1	14.-	14.-
110.079	Connector 20 pF (lamphead socket)	1	12.-	12.-
110.054	Socket guide with hook for 110.079	1	2.-	2.-
14858	Board doubler capacitors (complete)	1	80.-	80.-
14864	Board supply transformer	1	48.-	48.-
105.080	Diode 70 A 800 V	1	8.-	8.-
105.049	Triac 25 A 800 V (with isolating 204.120 + 204.119 screws 211.203)	4 sets	4.-	16.-
105.039	Solid state relay MOC 3083 (new type)	2	4.-	8.-
111.051	Resistor 5E 10 W (for security)	5	4.-	20.-
105.116	Thyristor 4A 800 V (for trigger)	2	4.-	8.-
105.069	Transistor MOS 10 A 400 V	2	5.-	10.-
14012	Transistor BC 547 NPN	10	2.-	2.-
105.079	lc darlington arrays ULN 2074 for motherboard	2	4.-	8.-
105.060	lc decoder drivers SN 74LS247	3	2.-	6.-
105.061	lc preamplifier SL 486	1	5.-	5.-
105.064	Photodiode IR (BPW 41)	1	4.-	4.-
105.089	Regulator + 5 V LP2950 (TO 92)	2	2.-	4.-
105.053	Regulator + 12 V LM78L12 (TO 92)	2	2.-	4.-
105.075	Regulator - 12 V LM79L12 (TO 92)	2	2.-	4.-
105.078	Regulator LM 317T (TO 220)	2	2.-	4.-
106.038	Fuse holder	2	3.-	6.-
14646	Switch rocker 20 A	1	4.-	16.-
19057	Fuse 16 A (T) (5 x 20 mm)	10	8.-	8.-
19024	Fuse 16 A (F) (Internal 6,3 x 32 mm for security)	10	22.-	22.-
106.041	Fuse 800 mA (T)	10	18.-	18.-
106.040	Fuse 50 mA (F)	10	9.-	9.-
104.082	Capacitor 220 uF/385 V (doublers)	2	8.-	16.-
14340	Capacitor 3300 uF/360 V (storage)	2	33.-	66.-
107015	Fan 24 VDC	1	35.-	35.-
106.037	Thermal switch	1	3.-	3.-
110.083	Mains socket	1	2.-	2.-
111.059	Varistor 140 VAC	2	2.-	4.-
				<u>2'708.-</u>

MICRO BOARDS LIST

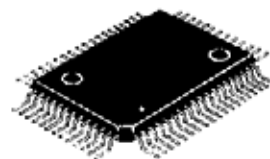
PRINT NU WITHOUT	MONTE WITH	DESCRIPTION	VOLTAGE
14800A	14849	<i>Synchro dimmers PB3</i>	110 V
14802	14852	Power display	110/220 V
14803	14853	Outlet display	110/220 V
14808	14858	doubler (2 x for 110 V version)	110/220 V
14804A	14859	<i>booster trigger PB4</i>	110 V
14811	14862	<i>Power ac entry</i>	110 V
14813	14864	<i>Power supply transformer</i>	110 V
14805	14882	<i>Discharge - Overvoltage PB5</i>	110 V
14816	14866	<i>Auxiliary board diode network</i>	110 V
14817	14868	<i>Auxiliary board interface socket</i>	110 V
14807	14869	<i>Motherboard PB6 with 14866</i>	110 V
14870	14870	Micro board PB1 (new version)	110/220 V
14821	14871	Voltage measurement converter PB2 (new version)	110/220 V
14812		Board lamphead socket (only without elements)	110/220 V
	14876	<i>Initial kit repair for 110 V</i>	
	14879	<i>Set EPROM AS-1-60Hz (105.113 - 105.114- 105.115)</i>	110 V
102.074	14809	Auxiliary board for IRS TWO-FIVE	
102.072	14810	IRS standard board	
14815	14865	Syncon board (110V/220V with manual selection)	
TOOLS			
11933		MICRO TEST BOX (for PB1 14870)	110 V
11934		A/D TEST BOX (for PB2 14871)	110 V

THE CONTROLS

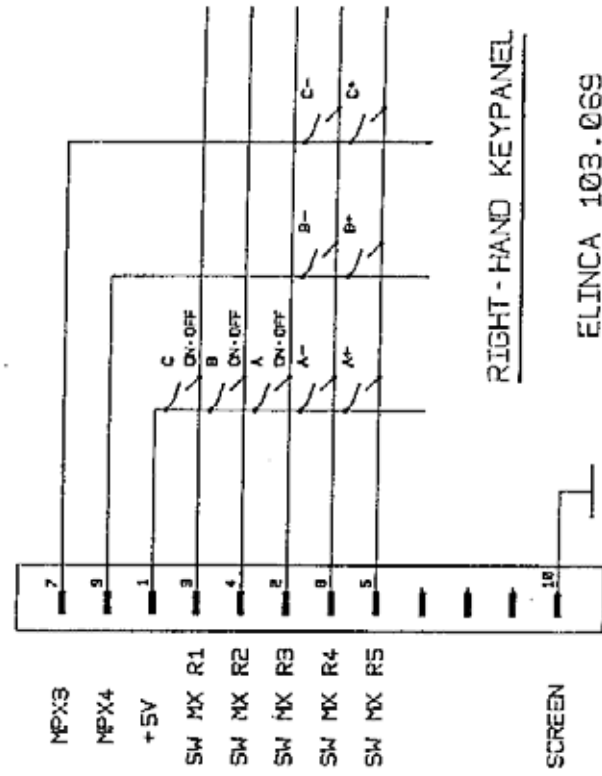
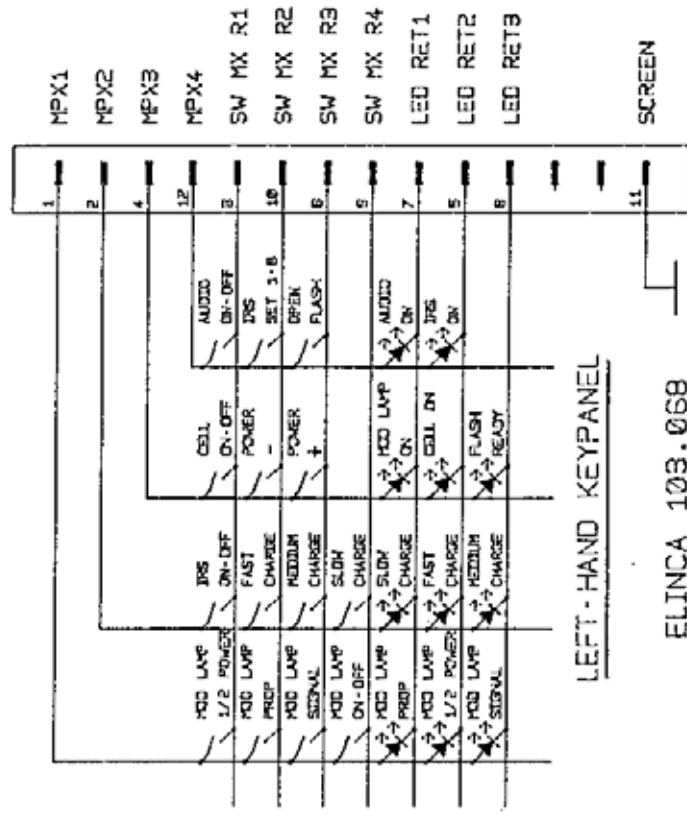
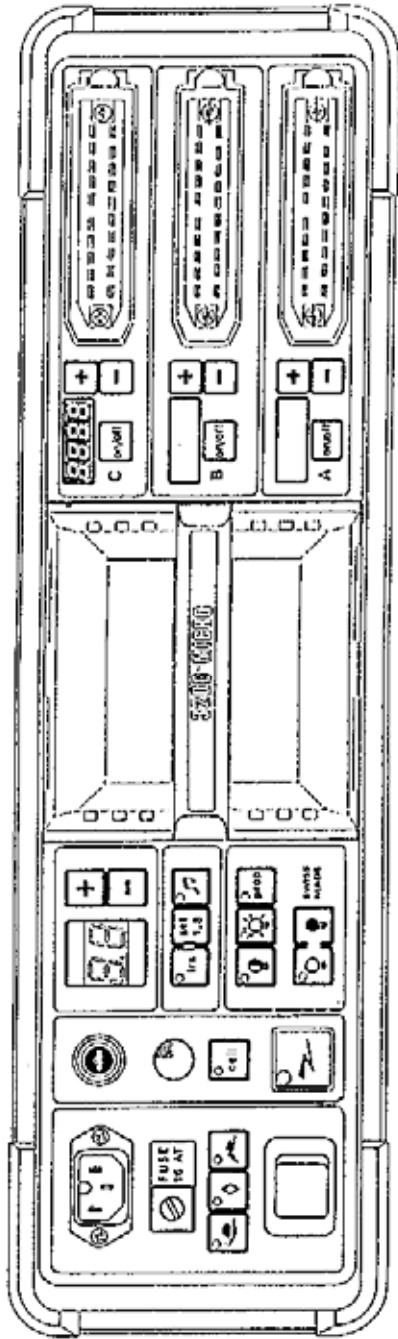


- | | |
|--|--|
| 1 Power socket | 13 Multi-purpose acoustic signal |
| 2 Fuse | 14 Half/full power for modelling lamps |
| 3 Charge speed selectors | 15 Modelling lamps ON/OFF |
| - slow charge 6 A | 16 Modelling lamp dimmer/charge signal |
| - normal charge 10 A | 17 Proportional modelling light |
| - fast charge 16 A | 18 Lampheads ON/OFF |
| 4 Modelling lamps switch off during slow charge when touch 16 is pressed | 19 LED indication in Ws/Joules |
| 5 Mains switch | 20 Lamphead sockets |
| 6 Photocell and IR-Receiver | 21 Security catches |
| 7 Sync socket with security lock | 22 Lamphead power variators |
| 8 Photocell ON/OFF | |
| 9 Open flash with charge indicator | |
| 10 IR-Remote Control ON/OFF | |
| 11 LED indication of total power | |
| 12 Generator selector for IR (1-8 packs) | |

MICROPROCESSOR



Technology



110V/220V - VERSION

ELINCHROM MICRO
CONTROL KEYPANELS
SCHEMATIC DIAGRAM

MICRO
SWISS MADE

RE : AFTER SALES SERVICE
BETRIFFT : REPARATURDIENST
CONCERNE : SERVICE APRES-VENTES

LAMPHEADS FOR THE "MICRO" GENERATORS

From Photokina 1986, all lampheads for generators have been fitted with an auto-signalling resistance to indicate to the microprocessor in the new "MICRO" generators the maximum power acceptable to the lamphead. These lampheads are listed below as version 1986 and version 1988.

Version 1986

A2, A4, R2, R4, S2, T4, X8

Version 1988

A3000, R2000, R4000, S2000, S3000,
S4000, X8000, Box 4000

Lampheads manufactured before Photokina 1986 will signal "malfunction" to the Microprocessor. These models, listed below, may be adapted by fitting the appropriate resistance into the connector (see overleaf).

A, R with tube 24006/2000 Ws
R with tube 24048/4000 Ws
S, T, X

N.B. : No lampheads manufactured before 1980 may be used with "MICRO" generators.

LAMPHEAD MODIFICATIONS
LAMPENKOPF VERAENDERUNGEN
MODIFICATIONS DES TORCHES

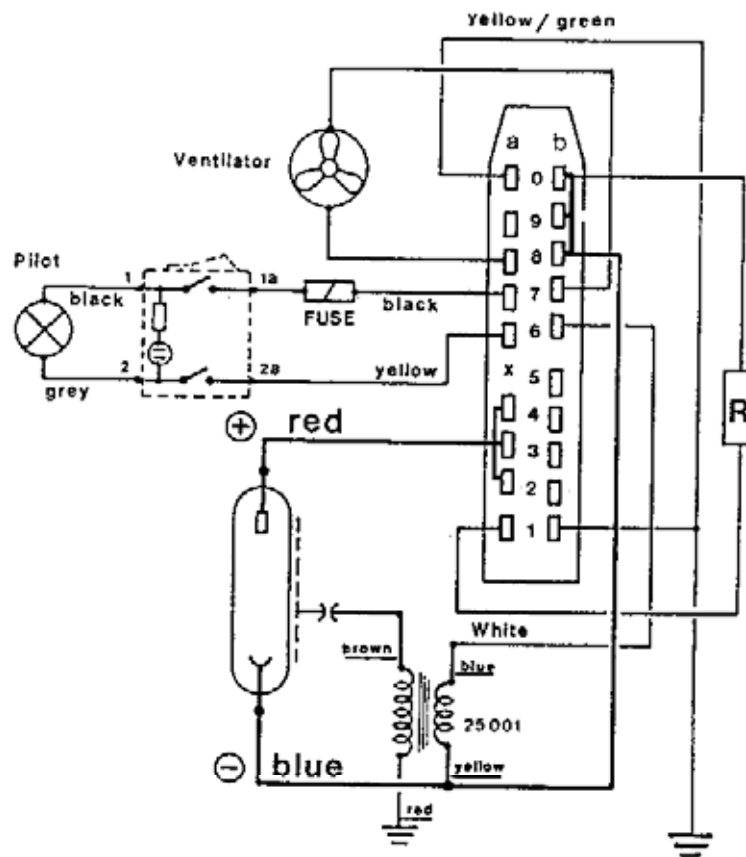


TABLEAU DES VALEURS DE R

Lampheads Lampenköpfe Torche adaptable	Lamphead equivalents Verwendbare Lampenköpfe mit Micro Torches compatibles avec Micro	Resistance values R = Wert R = Valeur
S, R avec 24006	S2 & R2 A2	S2000, R2000, S1500N 100Ω 0,5W 1% max. 220Ω
T	T4 & R4	S4000, R4000 470Ω
A, R avec 24048	A4 & Box Lite	Box 4000/3000 820Ω
X	X8	X8000 1,8 KΩ
		S3000, X6000N, SPOT LITE 3,3 KΩ
		A3000 6,8 KΩ
		S6000 * 1,2 KΩ
	Lampcord extension Lampenkabel-Verlängerung Cordon rallonge	

★ MODIFICATIONS AND IMPROVEMENTS

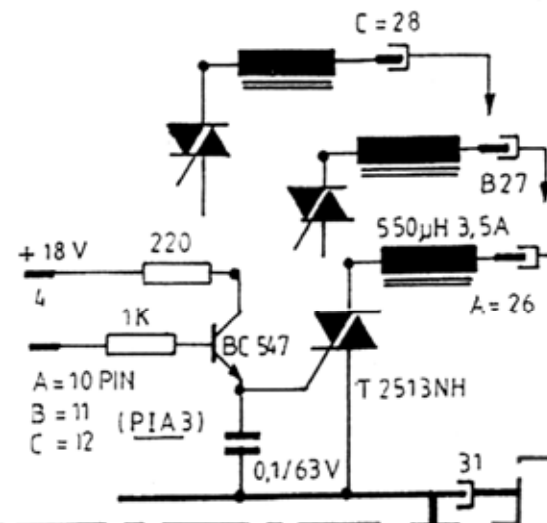
TECHNISCHE ÄNDERUNGEN UND
VERBESSERUNGEN

MODIFICATIONS & AMÉLIORATIONS
TECHNIQUES

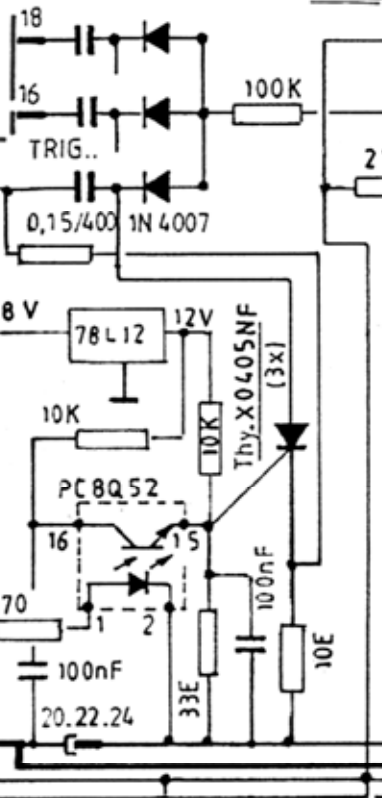
UP-DATE 11.92

MODELLING LAMP DIMMERS

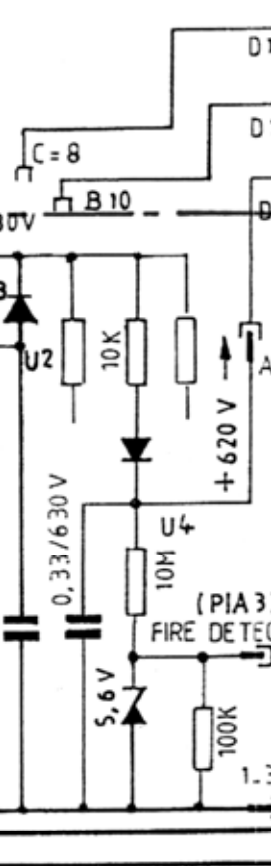
PRINT 14849 PB3



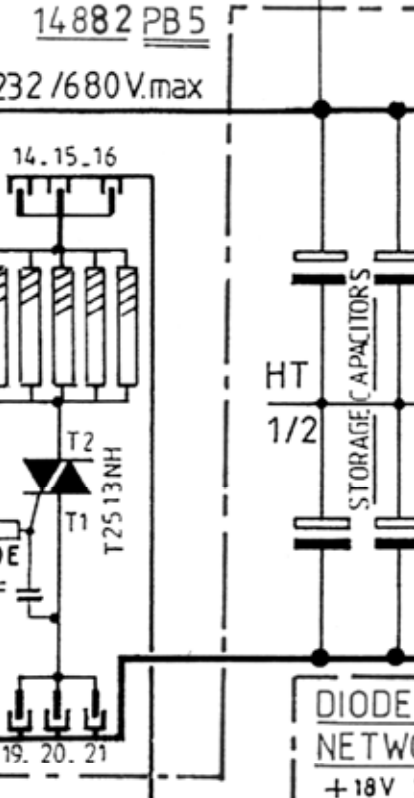
TRIGGER BOOSTER
PRINT 14859 PB4



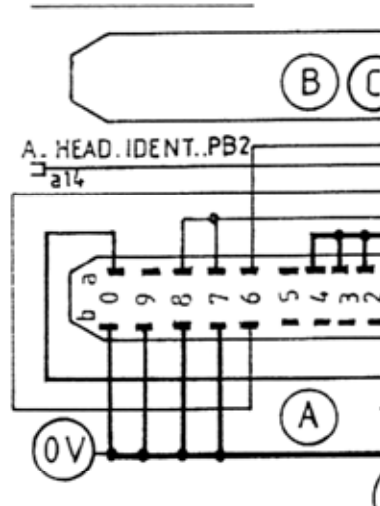
POWER DIODES



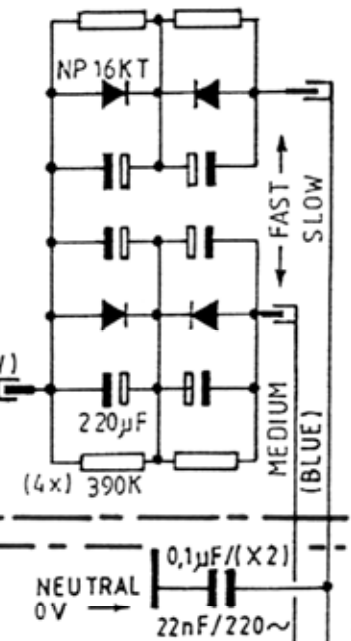
SAFETY - OVERVOLTAGE
BALANCE - DISCHARGE
14882 PB5



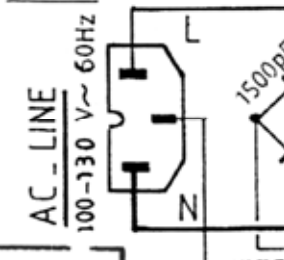
LAMPHEAD SOCKETS
PRINT 14812



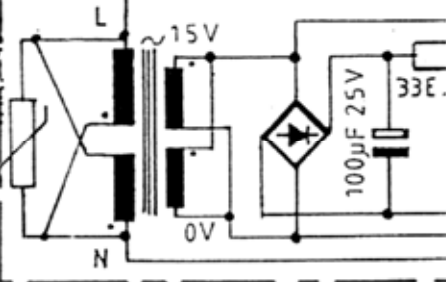
DOUBLER 14858



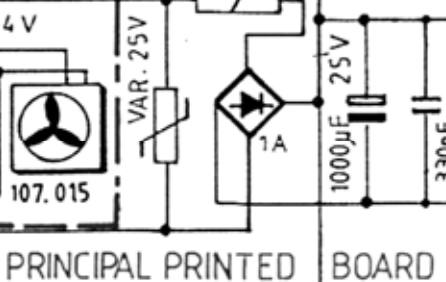
POWER SUPPLY
14862



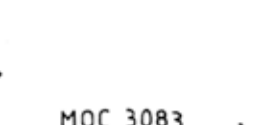
TRANSFORMER 14864



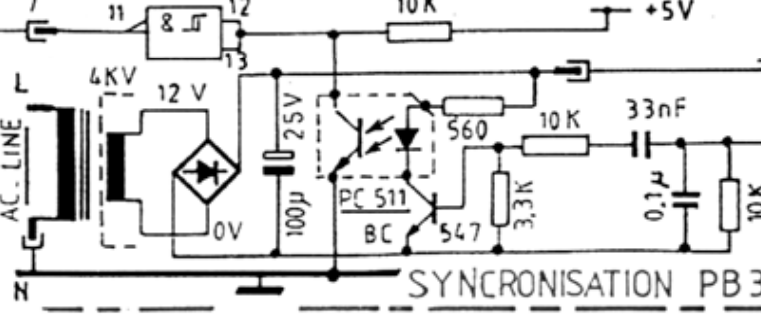
DIODE NETWORK
+18V SYST.



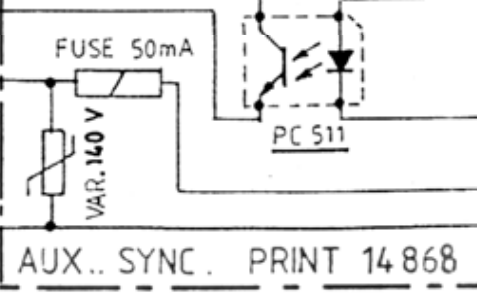
MICRO AS
110V - VERSION
05.94



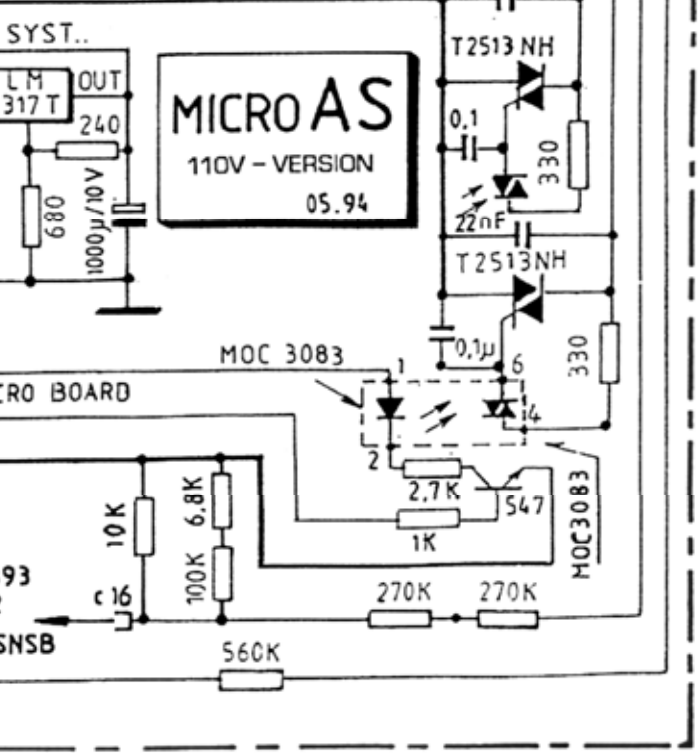
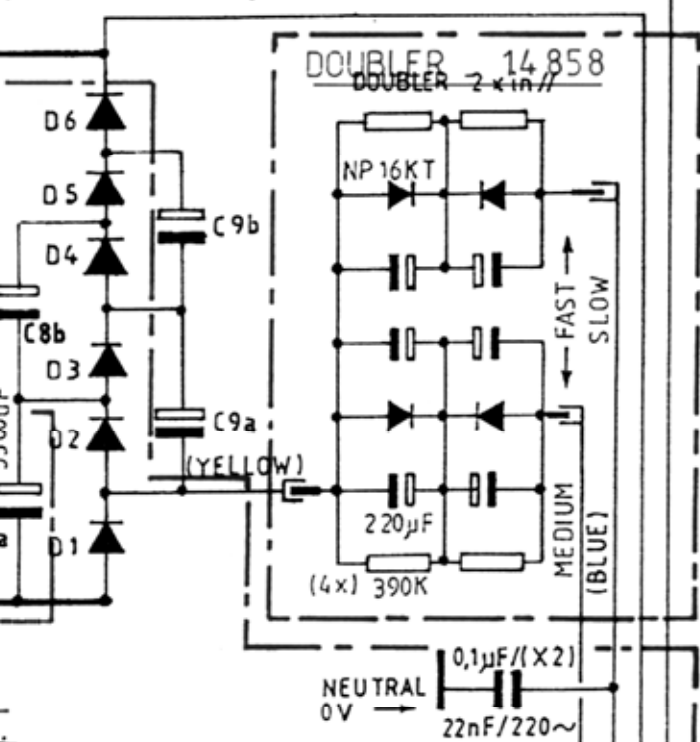
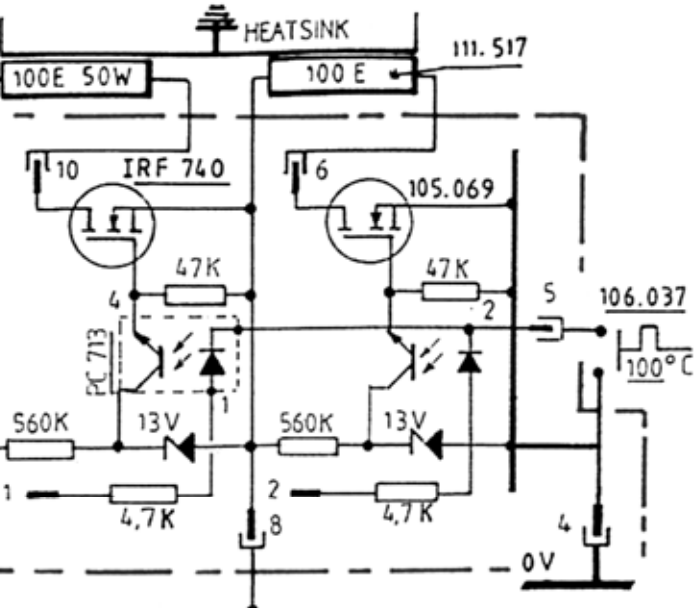
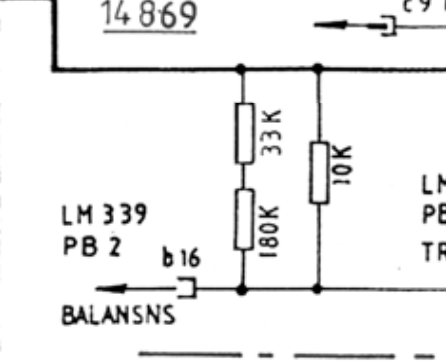
SYNCHRONISATION PB3

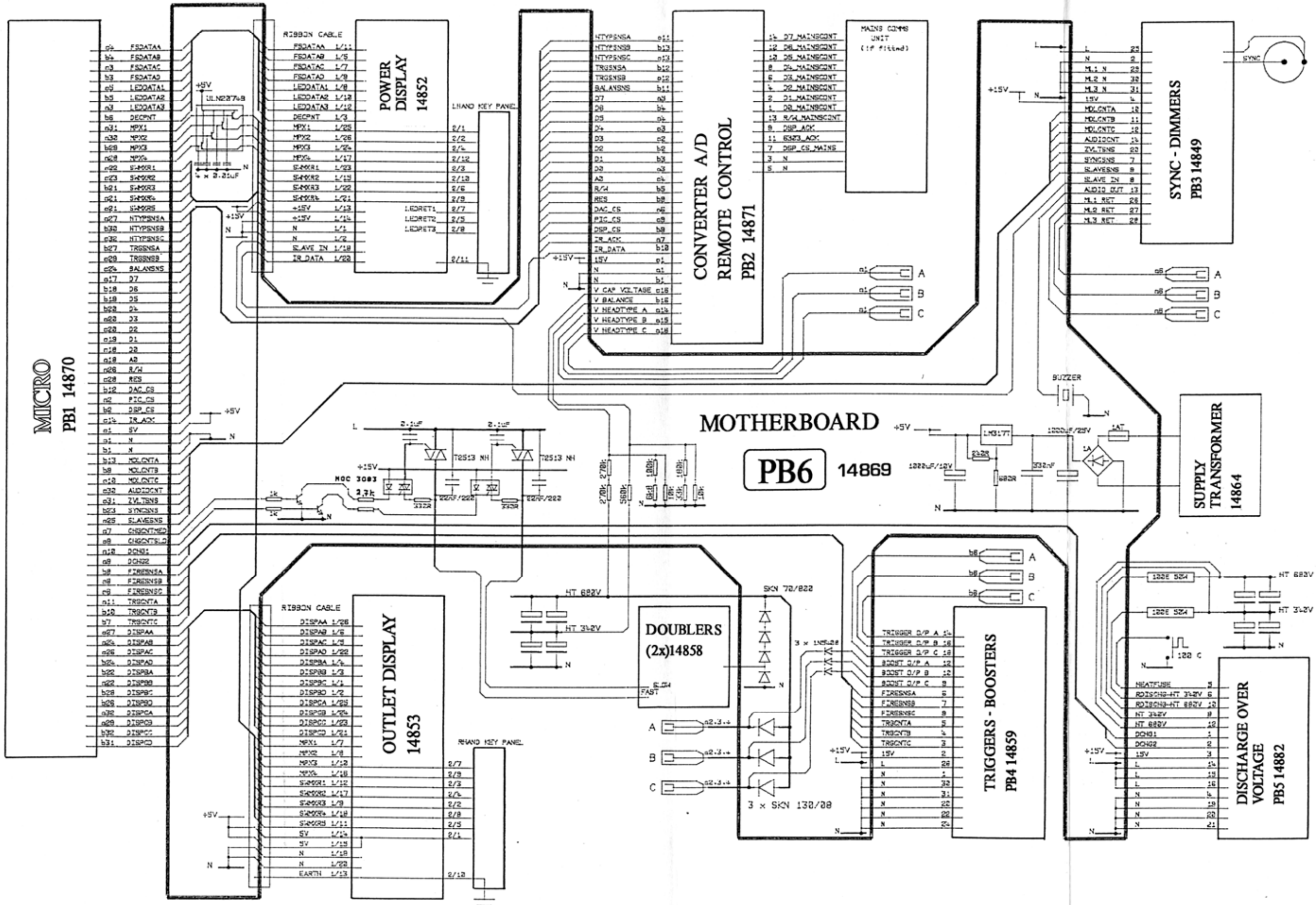


AUX. SYNC. PRINT 14868

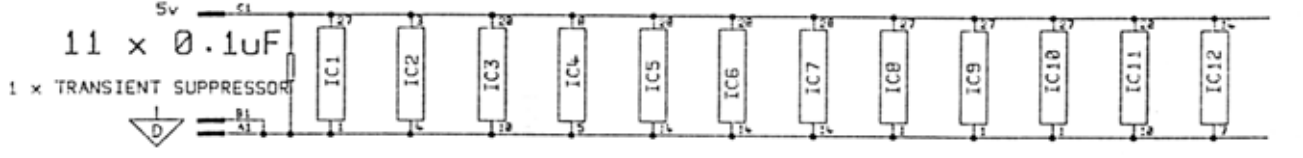
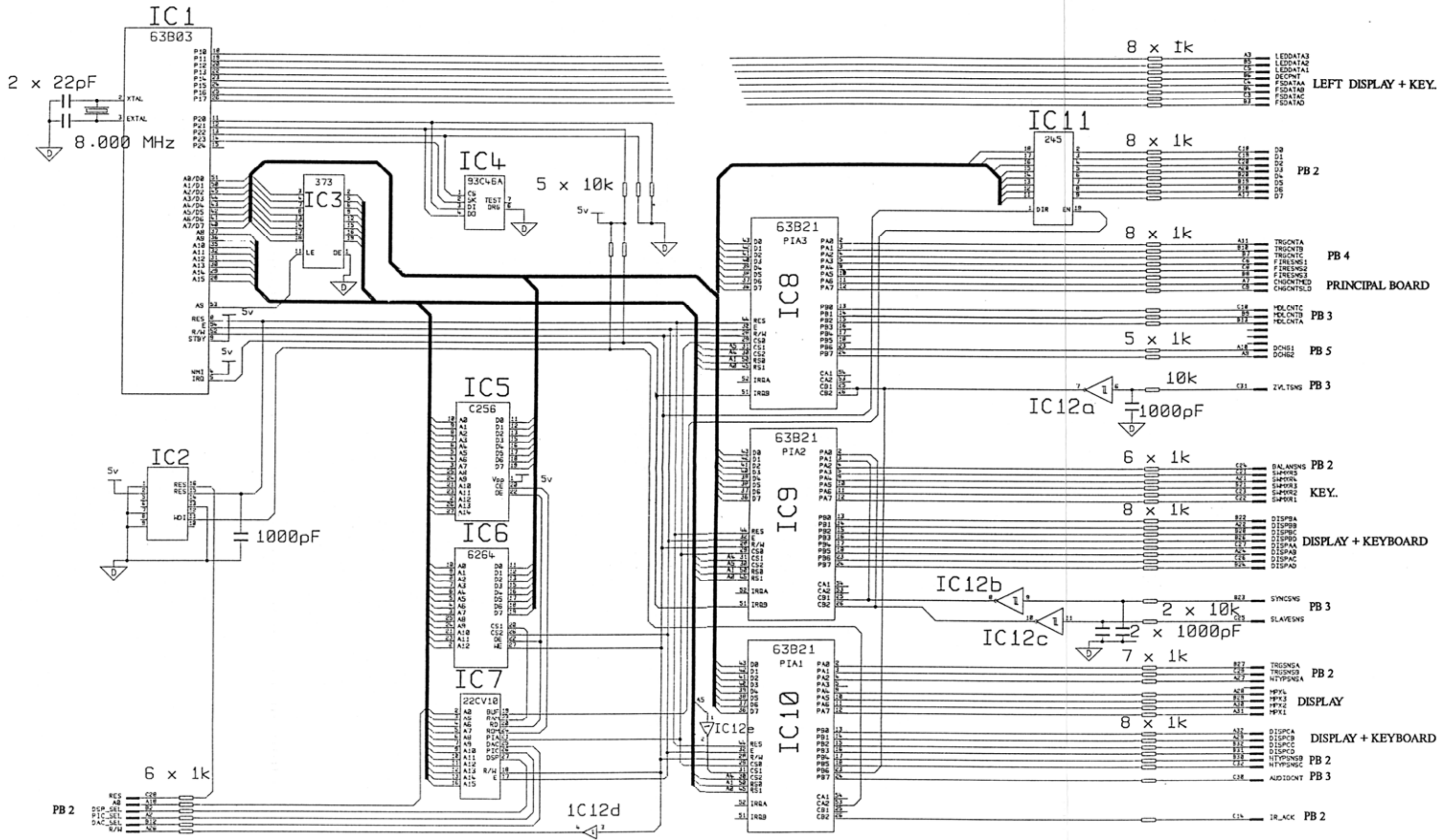


PRINCIPAL PRINTED BOARD
14869





MICRO AS MOTHERBOARD 14869
INTERCONNECTION DIAGRAM



EPROM SEE LIST

ASYMMETRICAL VERSION 110V/60 Hz
 with 14870 + 14871
 EPROM: label AS
 ORDER: for 1500 AS 105.113
 3000 AS 105.114
 6000 AS 105.115

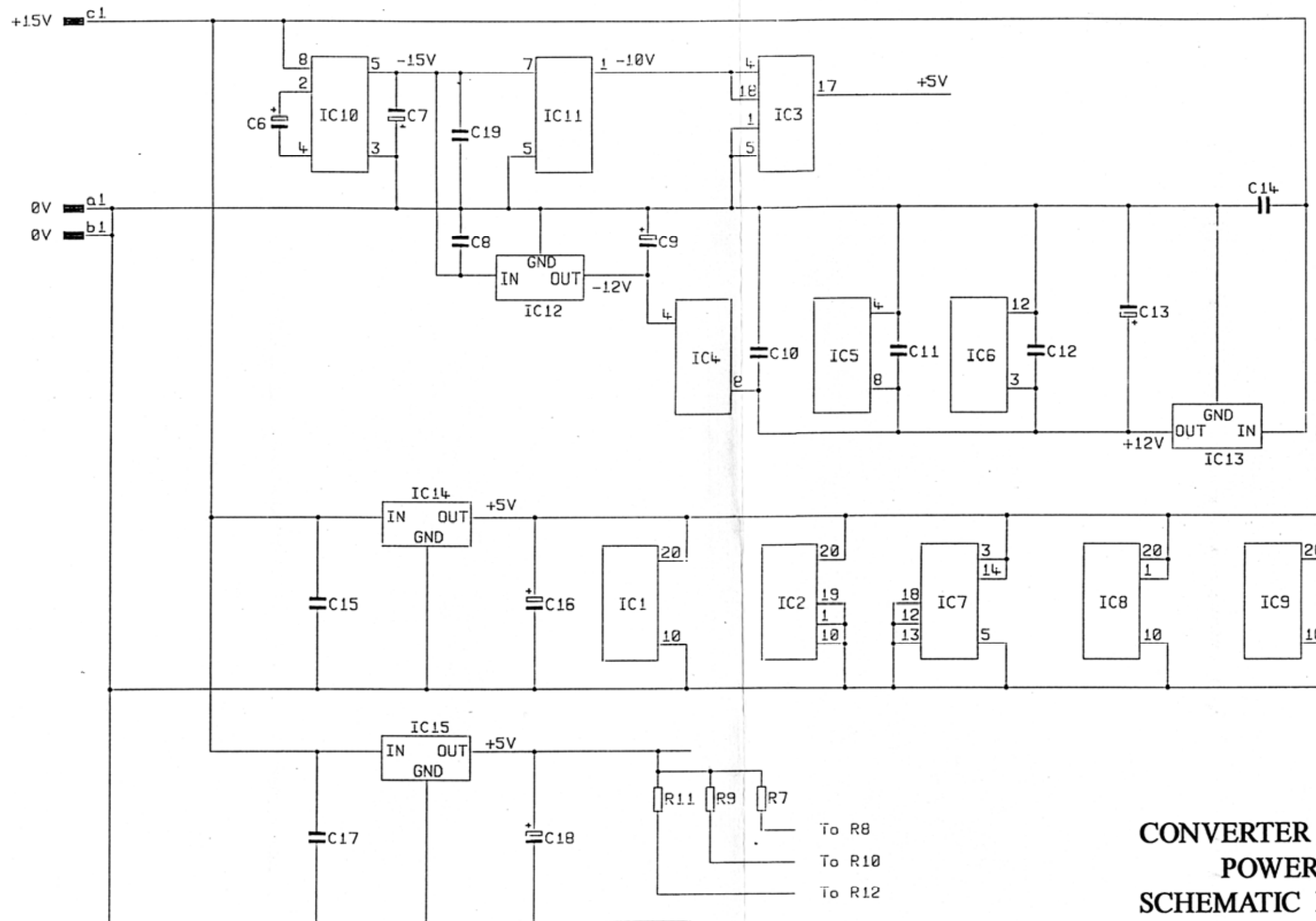
- ◆BALANSNS =voltage balance sense
- ◆SYNCSNS =syncro sense
- ◆SLAVESNS =cell/slave sense
- ◆AUDIOCONT =audio/buzzer control
- ◆HTYPSNSA =head sense A/B/C
- ◆TRGSNSA =trigger sense A/B
- ◆ZVLTSNS =zero voltage sense
- ◆MDL CNT =modelling lamp control
- ◆FIRESNS =fire sense A/B/C
- ◆TRGCNT1 =trigger control
- ◆CHGCNTSLO/MED =charge control slow/med..
- ◆DCHG1/2 =discharge control

MICRO AS BOARD

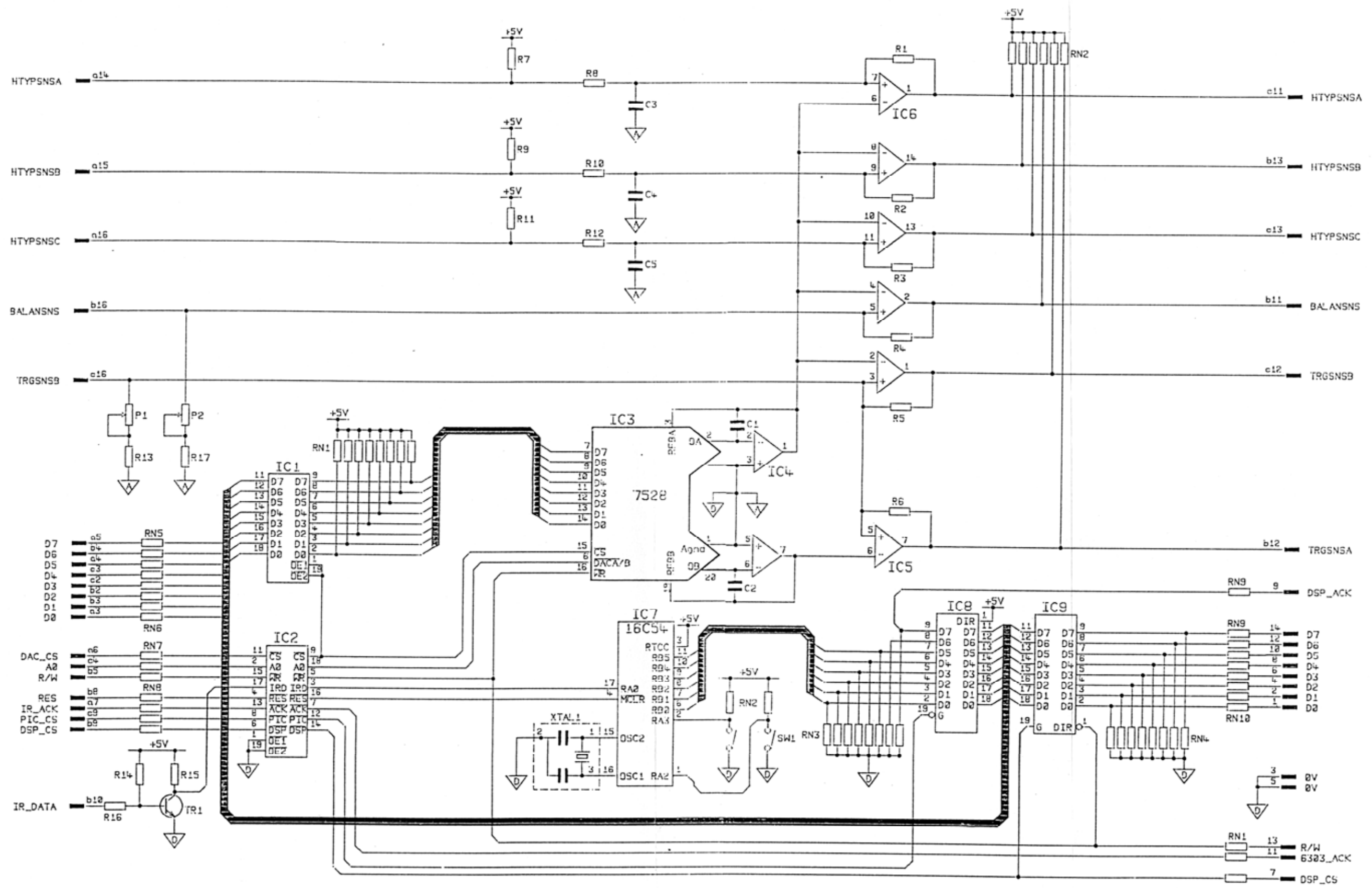
SCHEMATIC DIAGRAM 14 870

110V - VERSION

P B 1



CONVERTER AND REMOTE
POWER SUPPLY
SCHEMATIC DIAGRAM 14 871



**USE ONLY WITH
MICRO BOARD
14 870**

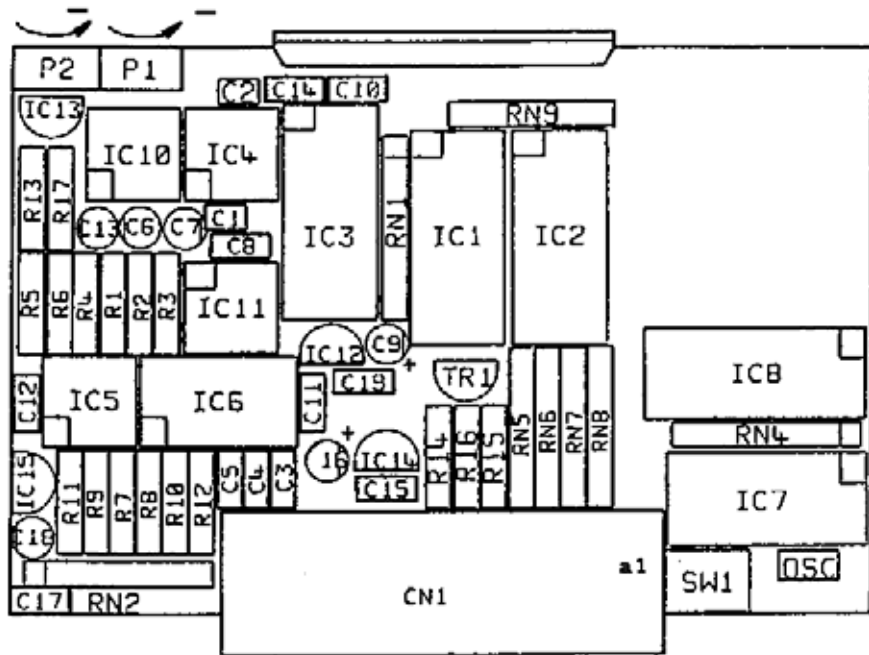
**VOLTAGE MEASUREMENT
AND
REMOTE CONTROL**

P B 2

**CIRCUIT ASSEMBLY 14 871
110V/220V - VERSION**

06.1991

VOLTAGE MEASUREMENT AND REMOTE CONTROL



Part N°	Specification
14 821	BOARD WITHOUT ELEMENT
121.471	RES. 470E 1% R7-R9-R11
121.103	RES. 10K 1% R8-R10-R12
121.333	RES. 33K 1% R13-R17
121.363	RES. 36K 1% R14
121.512	RES. 5K1 1% R15
121.102	RES. 1K 1% R16
120.106	RES 10M 5% R1-2-3-4-5-6
14 034	LM 339 QUAD COMPARATOR IC6
105.102	74HC245 BUFFER BID. IC1-IC8
105.103	74HC240 BUFFER INV. IC2
105.071	CONVERT D/A 7528 IC3
105.070	LF 412 BIFFET OP-AMP IC4
105.055	LM 393 DUAL COMP IC5
105.104	PIC 16C54 PROCESSEUR IC7
105.072	7662 -5V INVERTER IC10
105.200	REF08 -10V REFERENCE IC11
105.075	LM79L12 -12V REGULATOR IC12
105.063	LM78L12 +12V REGULATOR IC13
105.089	LP2950 +5V REGULATOR IC14-IC15
105.160	4.00Mz RESONATOR OSC
105.150	BC184L TRANSISTOR NPN TR1
104.001	10pF CERAMIC DISC C1-C2
104.105	1nF POLYESTER CAPA. C3-C4-C5
104.100	10uF 35V ELECTROYTIC C6-7-9-13-16-18
104.066	100nF POLYESTER C8-10-11-12-14-15-17-19
111.609	10Kx8 NETWORK COMMON RN1-RN2-RN4
111.611	1Kx4 NETWORK ISOLATED RNS-6-7-8
109.026	50K PRESET P1-P2
110.075	48 WAY CONNECTOR CN1
103.066	2 WAY DIL SWITCH SW1
110.093	IC-SOCKET 20P
110.094	IC-SOCKET 18P
110.063	IC-SOCKET 14P
110.092	IC-SOCKET 8P
14 663	CARD SPACER

**USE ONLY WITH
MICRO BOARD
14 870**

CONVERTER BOARD

MICRO AS

110V/220V - VERSION

P B 2

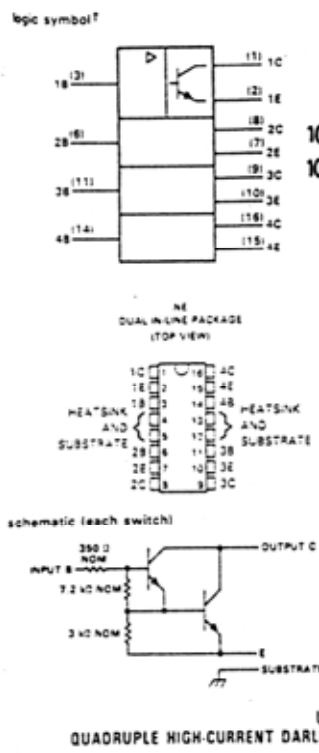
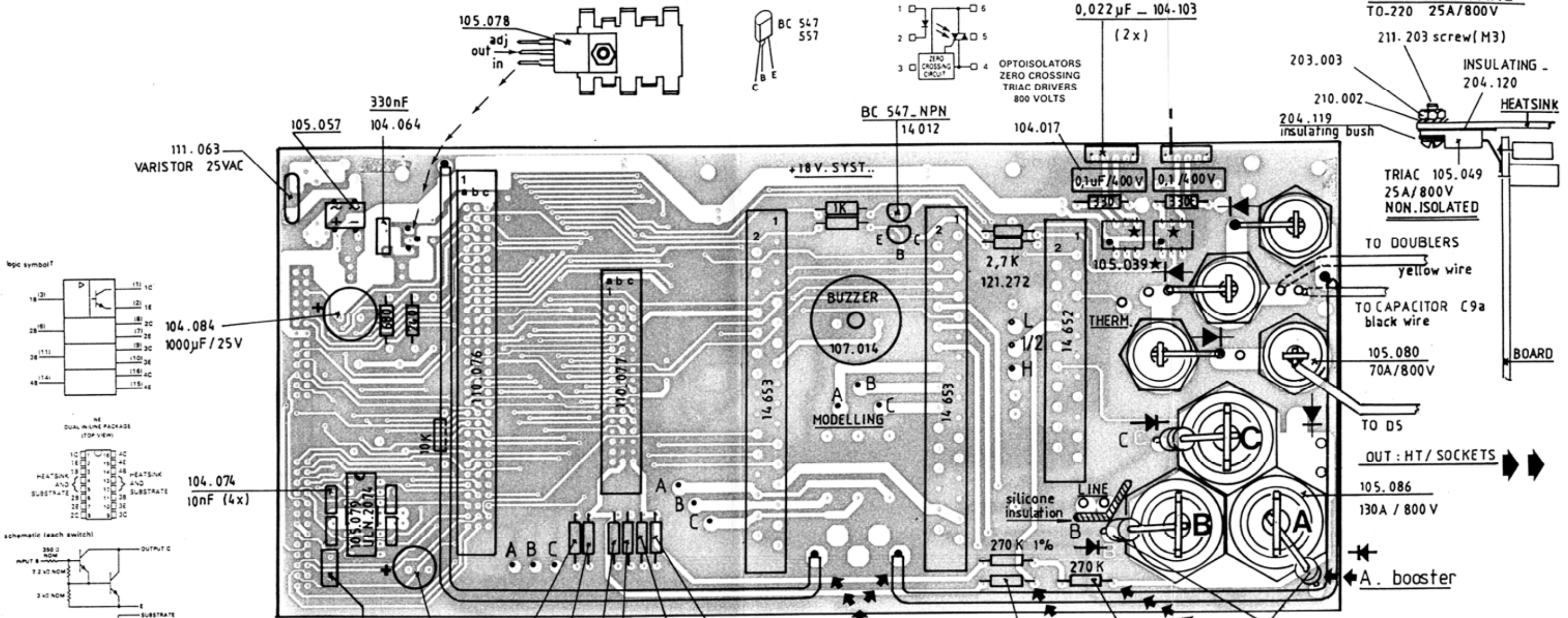
CIRCUIT ASSEMBLY 14 871

**630.008 ASSEMBLY
ADJUSTABLE REGULATOR**

**COUPLER SCHEMATIC
MOC3083**

**DEPARASITAGE TRIACS
DISTURBANCES SUPPRESSOR**

**TRIAC MOUNTING
TO-220 25A/800V**

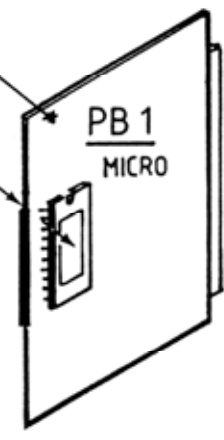


TEST THE MICRO BOARD WITH THE CONTROLLER BOX
CODE ORDER : 11933

EPROM FOR: ORDER
 1500 MICRO AS → 105.113
 3000 " → 105.114
 6000 " → 105.115

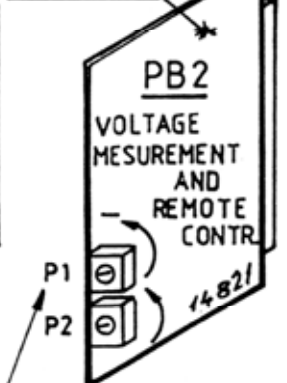
ADJUST +680 ±2 VDC.

WITH TOTAL POWER DISPLAYED
 8.0 FOR 1500 MICRO AS
 9.0 " 3000 "
 10 " 6000 "

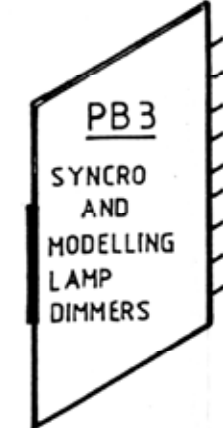


14870

TEST BOX FOR PB2
11934



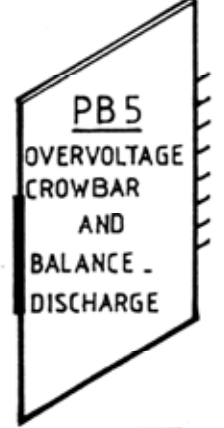
14871



14849



14859



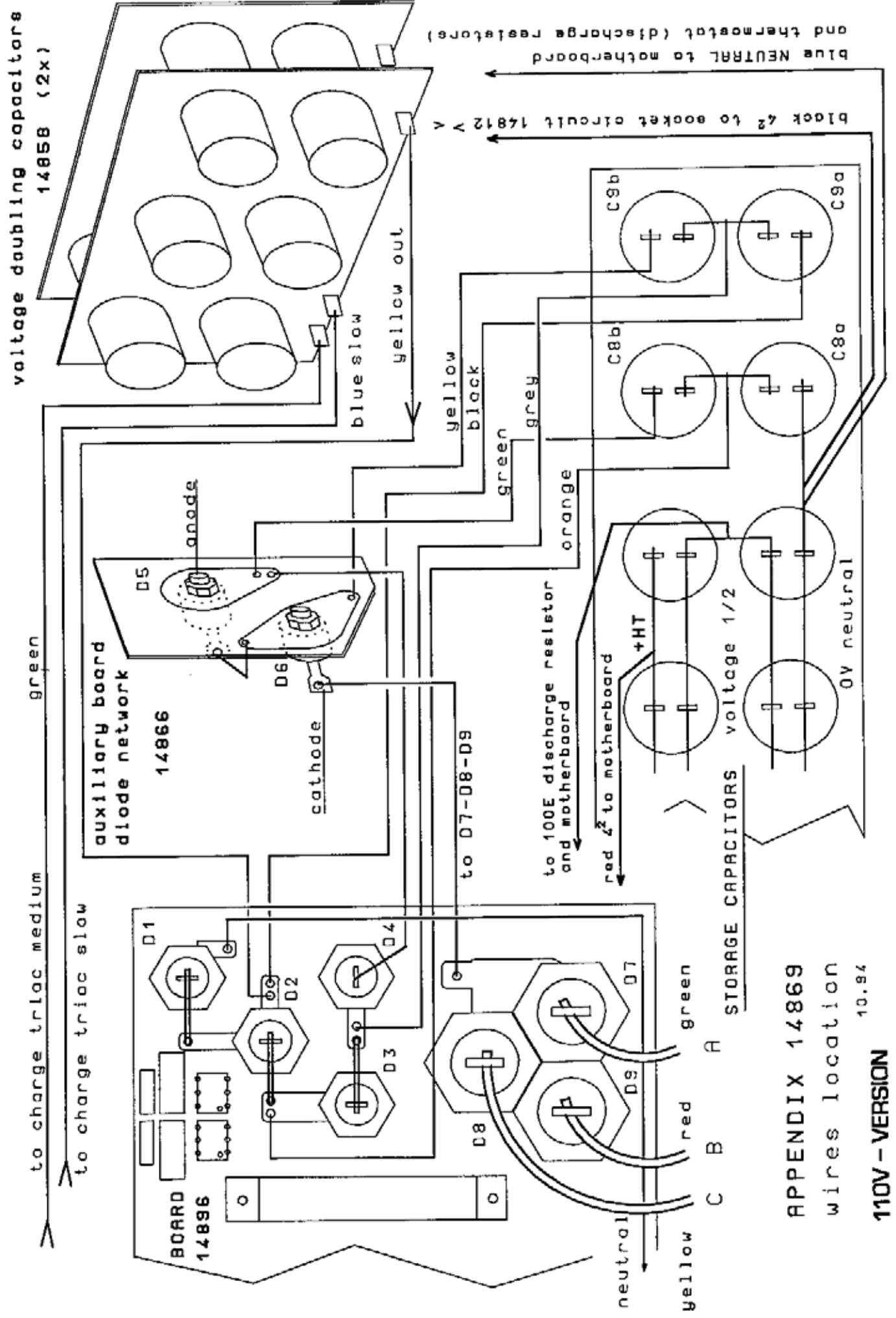
14882

P1=OVERALL VOLTAGE SETTING
 P2= BALANCE ADJUSTEMENT AT 340 V

**PRINCIPAL PRINTED BOARD
for servicing order :**

14869

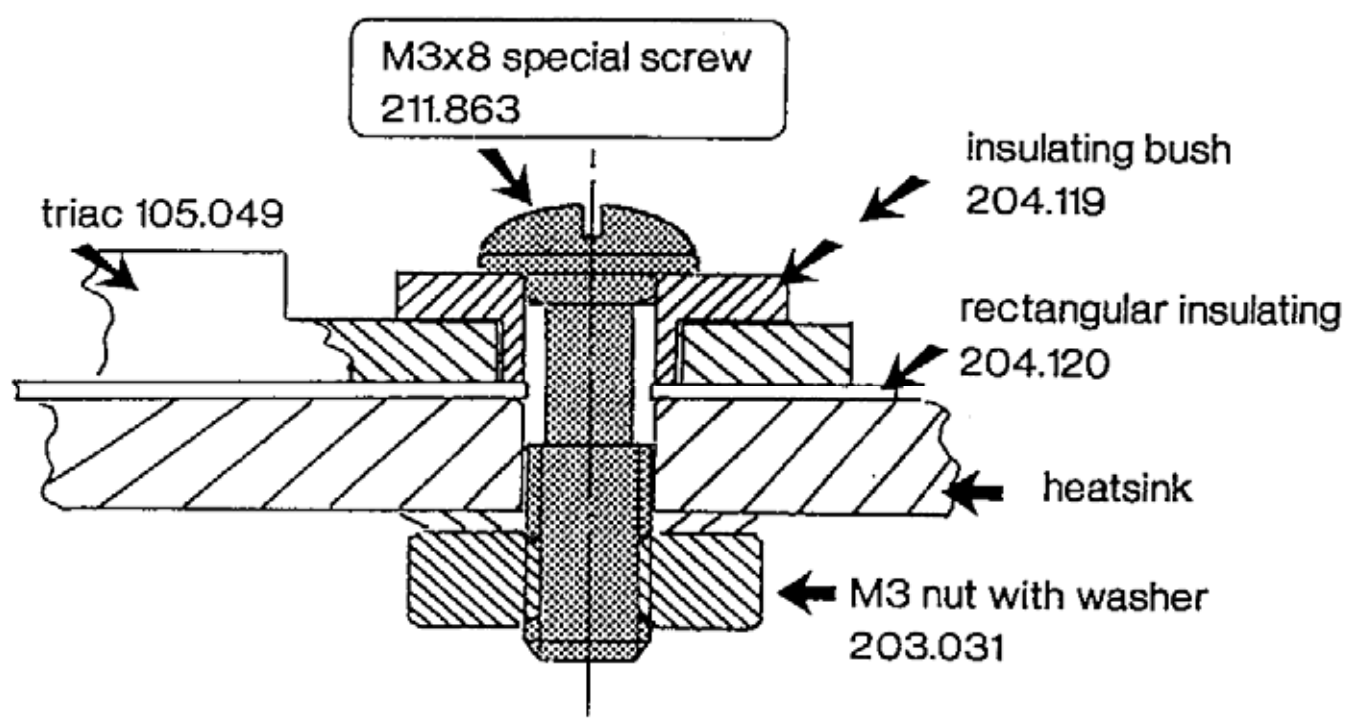
110V - VERSION



APPENDIX 14869
wires location
10.84
110V - VERSION

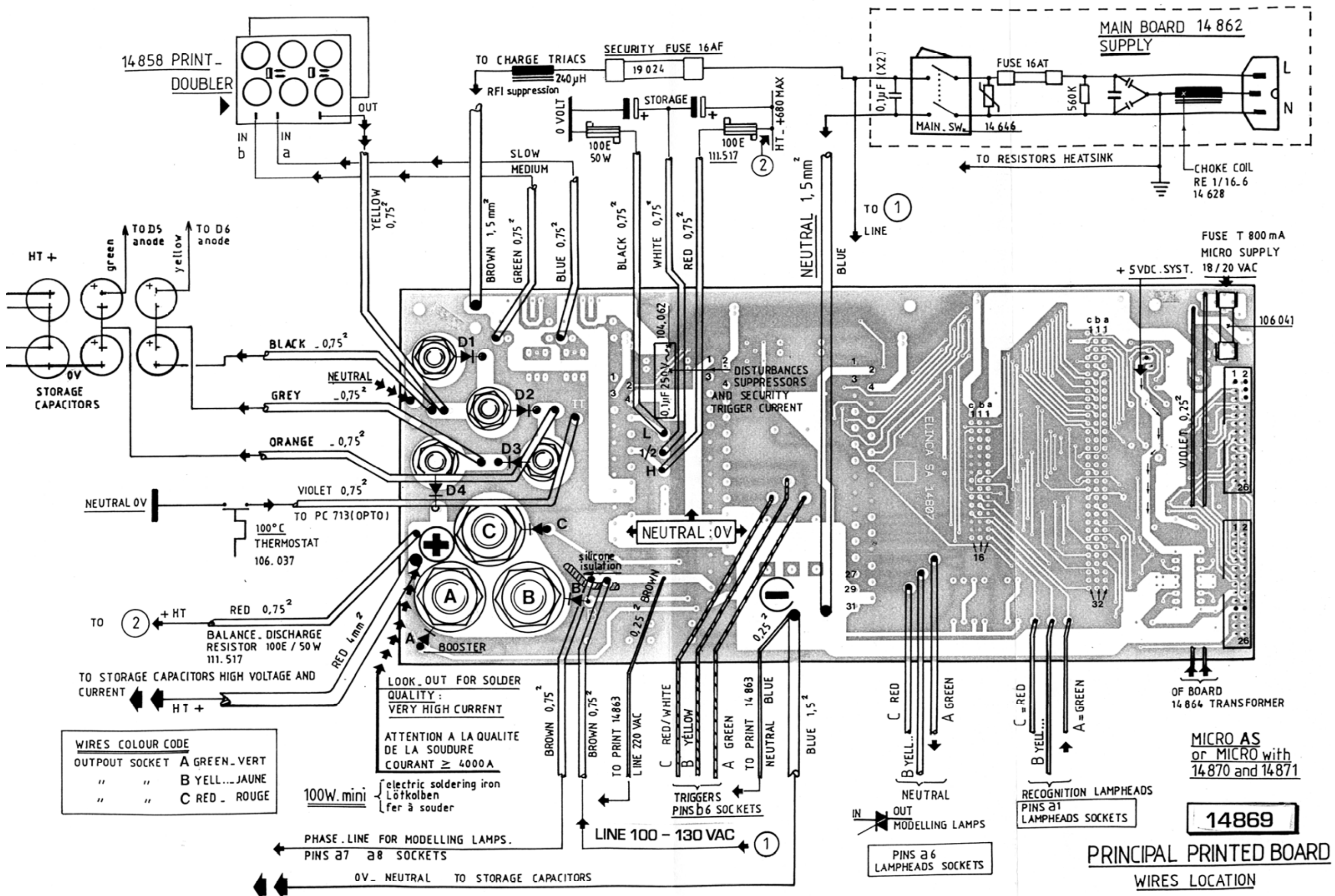
MICRO AND MICRO AS

MOUNTING INSTRUCTION FOR TRIAC INSULATION



When mounting the screw on the TO 220 envelope, it is particularly important to apply torque slowly so that the mounting base is not deformed.

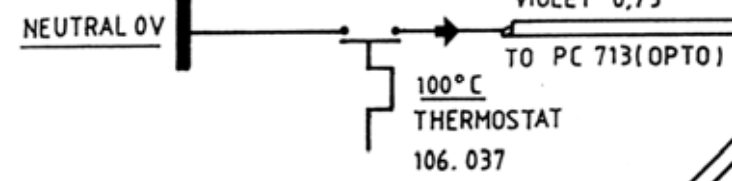
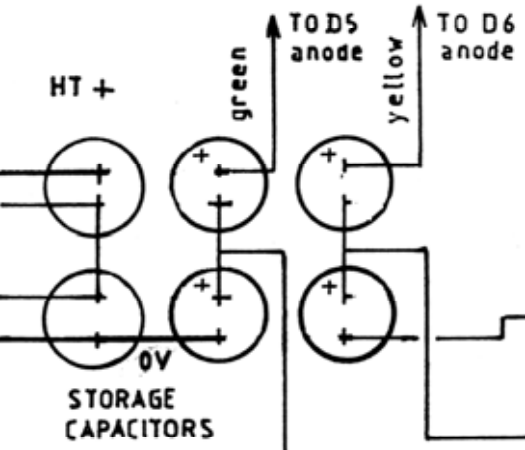
SET: 105.049+211.863+204.119+204.120+203.031
ORDER N° 900.001



14858 PRINT - DOUBLER

SECURITY FUSE 16AF

MAIN BOARD 14862 SUPPLY



BALANCE. DISCHARGE RESISTOR 100E / 50W 111.517

LOOK OUT FOR SOLDER QUALITY: VERY HIGH CURRENT
ATTENTION A LA QUALITE DE LA SOUDURE COURANT ≥ 4000 A

WIRES COLOUR CODE

OUTPUT SOCKET	A	GREEN - VERT
"	B	YELL... JAUNE
"	C	RED - ROUGE

100W.mini { electric soldering iron / LötKolben / fer à souder

PHASE LINE FOR MODELLING LAMPS. PINS 27 28 SOCKETS

0V - NEUTRAL TO STORAGE CAPACITORS

LINE 100 - 130 VAC

MICRO AS or MICRO with 14870 and 14871

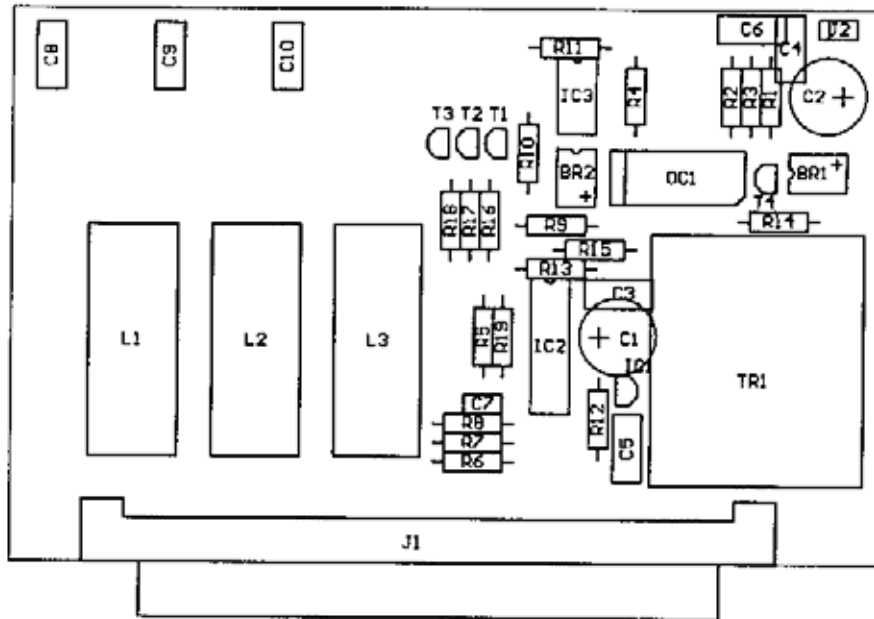
14869

PRINCIPAL PRINTED BOARD

WIRES LOCATION

110V - VERSION 10.94

SYNCHRONISATION MODELLING LAMP DIMMERS



PART N°	QTY	DESCRIPTION	REF. N°
14800A	1	PRINT	
100.044	3	INDUCTOR 550uH	L1-L2-L3
100.050	1	TRANSFORMER 240/12V	TR1
104.064	1	POLYESTER CAPACITOR 330nF	C5
104.066	5	POLYESTER CAPACITOR 100nF/63V	C3-4-8-9-10
104.072	1	POLYESTER CAPACITOR 33nF/63V	C6
104.078	1	TANTALUM CAPACITOR 10uF/16V	C1
105.049	3	TRIAC T2513NH 25A/900V	T1-2-3
105.053	1	PHOTOCOUPLER PC 511	OC1
105.054	1	VOLTAGE REGULATOR 5V	IC1
105.055	1	COMPARATOR LM 393A	IC3
105.057	2	RECTIFIER BRIDGE 1A 400V	BR1-BR2
105.059	1	IC 74HC132	IC2
110.058	1	CONNECTOR 31PM	J1
110.063	1	IC SOCKET 14P	IC2
110.072	1	2 PIN (POLARIZING HEADER)	J2
110.092	1	IC SOCKET 8P	IC3
121.102	4	1K RESISTOR	R6-7-8-9
121.103	5	10K RESISTOR	R2-4-11-12-13
121.105	1	1M RESISTOR	R15
121.154	1	150K RESISTOR	R5
121.220	3	220R RESISTOR	R16-17-18
121.332	1	33K RESISTOR	R3
121.474	1	470K RESISTOR	R19
121.561	1	560R RESISTOR	R14
14012	4	BC 547 TRANSISTOR	T1-2-3-4
14663	1	BOARD EXTRACTOR	
203.031	3	M3 NUT FOR TRIACS	
210.520	6	COPPER WASHER	
211.203	6	M3x6 SCREW FOR TRIAC	
204.128	3	INSULATING WASHER	
54005	1	CAPACITOR 100uF 25V	
201713	1	HEATSINK SET OF 3	
121.824	1	820K RESISTOR	
104.109	1	560pF CERAMIC CAPACITOR	
121.104	1	100K RESISTOR	R1

PB3

ELINCHROM MICRO
CIRCUIT ASSEMBLY 14849

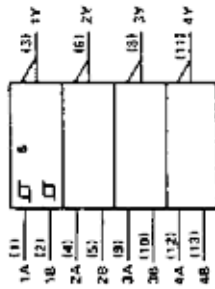
110V/220V - VERSION

Up-date 02.96

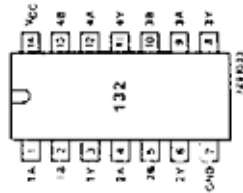
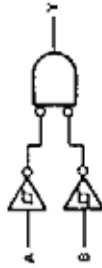
J1:D

+18U

logic symbol



logic diagram, each gate (positive logic)



FUNCTION TABLE

INPUTS		OUTPUT	
nA	nB	nY	nY
L	L	H	H
L	H	L	H
H	L	L	H
H	H	H	L

H = HIGH voltage level
L = LOW voltage level

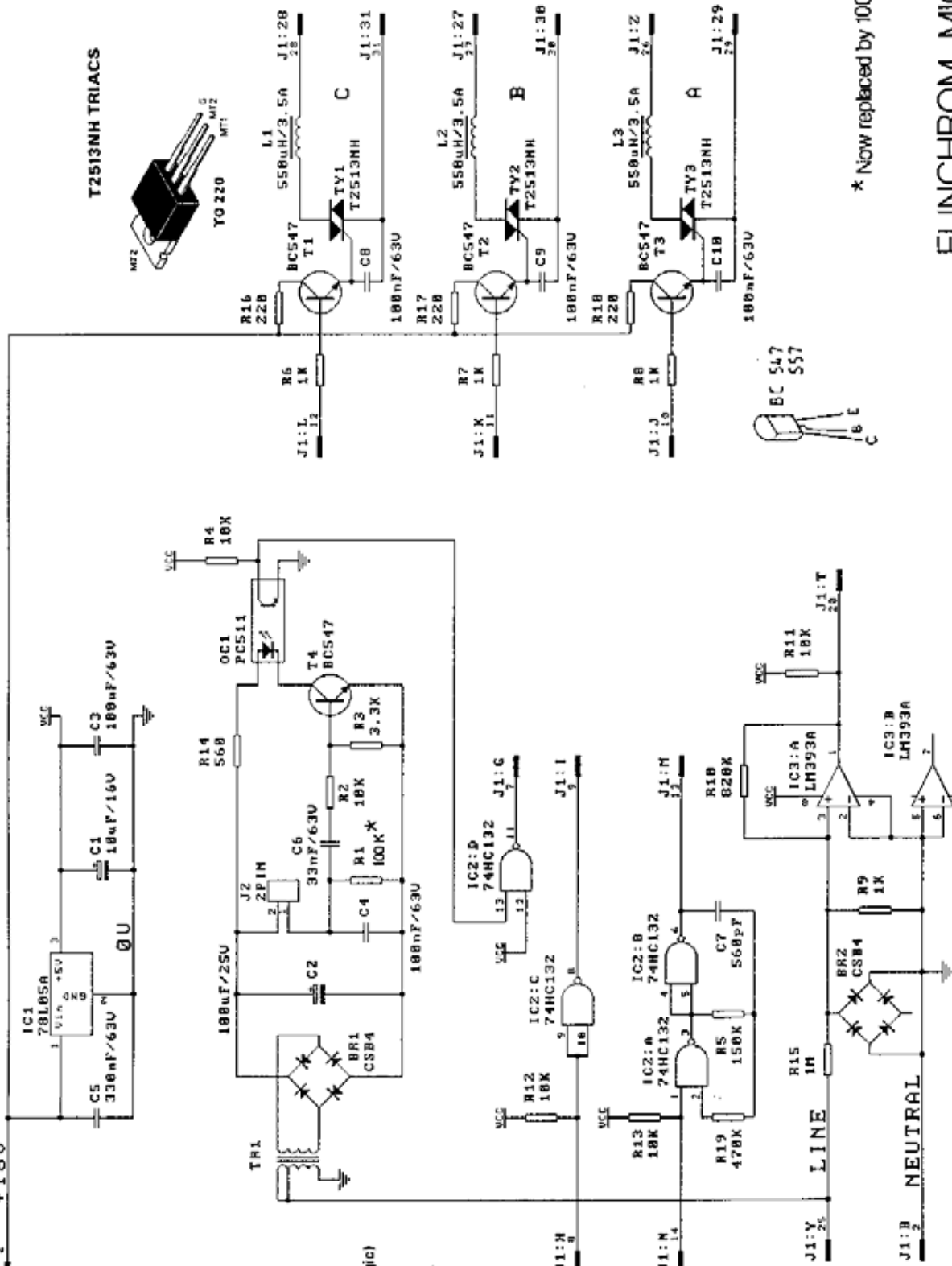
symbol (each comparator)



(TOP VIEW)



LM339M 14 PACKAGE



T2513NH TRIACS



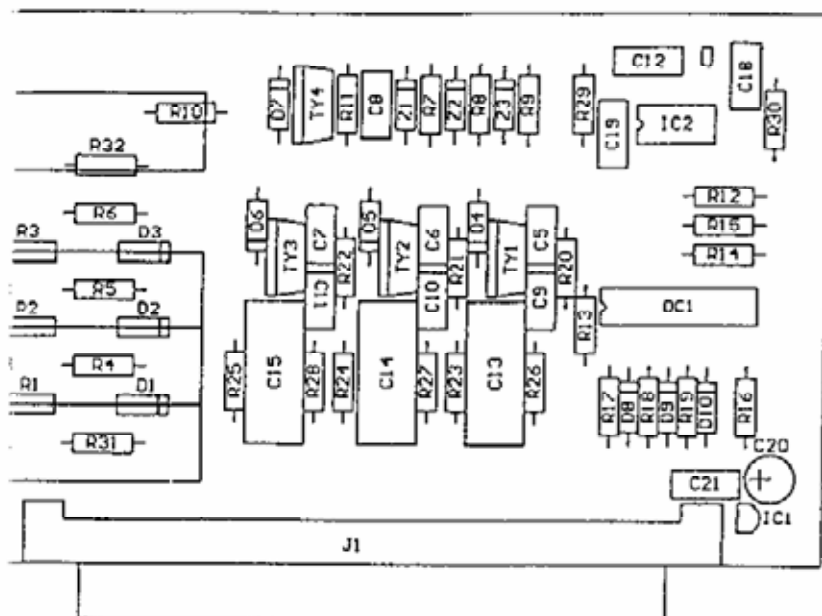
* Now replaced by 100 K

PB3

110V/220V - VERSION

ELINCHROM MICRO
CIRCUIT ASSEMBLY 14849
SCHEMATIC DIAGRAM

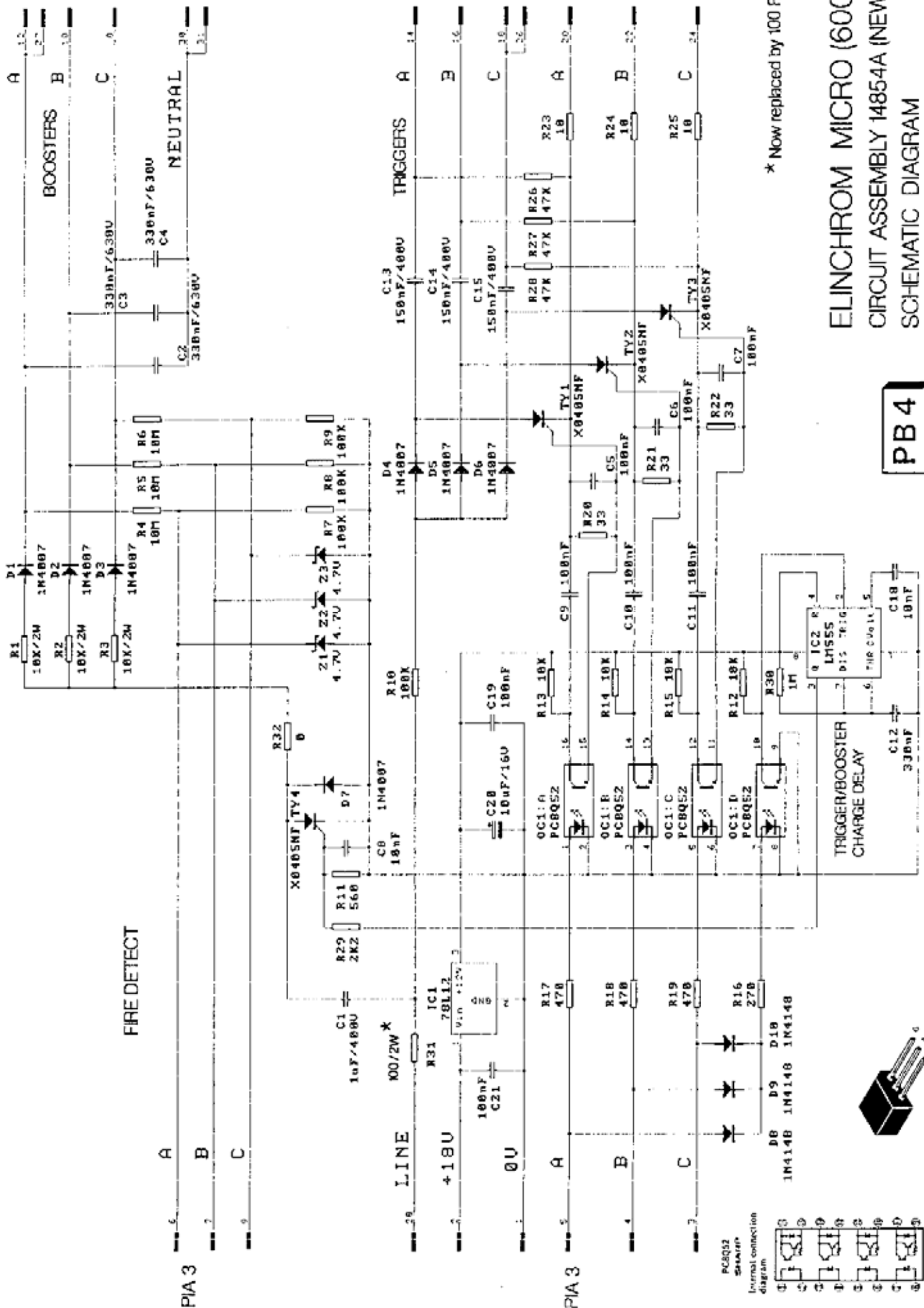
Up-date 02.96



QTY	DESCRIPTION	REF. N°
1	PRINT	
7	1N4007 RECTIFIER	D1-2-3-4-5-6-7
1	BOARD EXTRACTOR	
1	TIMER LM555	IC2
1	POLYESTER CAPACITOR 1µF/400V	C1
1	TANTALUM CAPACITOR 10µF/16V	C20
1	POLYESTER CAPACITOR 330nF	C12
8	CERAMIC CAPACITOR 100nF/63V	C5-6-7-9-10-11-19-21
2	CERAMIC CAPACITOR 10nF/63V	C8-18
3	POLYESTER CAPACITOR 150nF/400V	C13-14-15
3	POLYESTER CAPACITOR 330nF/630V	C2-3-4
3	1N4148 RECTIFIER	D8-9-10
1	VOLTAGE REGULATOR 78L12 (12V)	IC1
4	TYRISTOR X0405NF	TY1-2-3-4
3	ZENER DIODE 4.7V	Z1-2-3
1	PHOTOCOUPLER PC8Q52	OC1
1	CONNECTOR 31PM	J1
1	IC SOCKET 16P	
1	IC SOCKET 8P	
3	2K/2W RESISTOR	R1-2-3
1	2.8 mm P.C. B MOUNTING TAB	
1	JUMPER	R32
3	10R RESISTOR	R23-24-25
1	100R/2W	R31
4	10K RESISTOR	R12-13-14-15
4	100K RESISTOR	R7-8-9-10
1	1M RESISTOR	R30
3	10M RESISTOR	R4-5-6
1	2.2K RESISTOR	R29
1	270R RESISTOR	R18
3	33R RESISTOR	R20-21-22
3	470R RESISTOR	R17-18-19
3	47K RESISTOR	R26-27-28
1	560R RESISTOR	R11

PB 4

ELINCHROM MICRO (6000 AS)
CIRCUIT ASSEMBLY 14854A (NEW)



* Now replaced by 100 R/2 W

ELINCHROM MICRO (6000AS)
CIRCUIT ASSEMBLY 14854A (NEW)
SCHEMATIC DIAGRAM

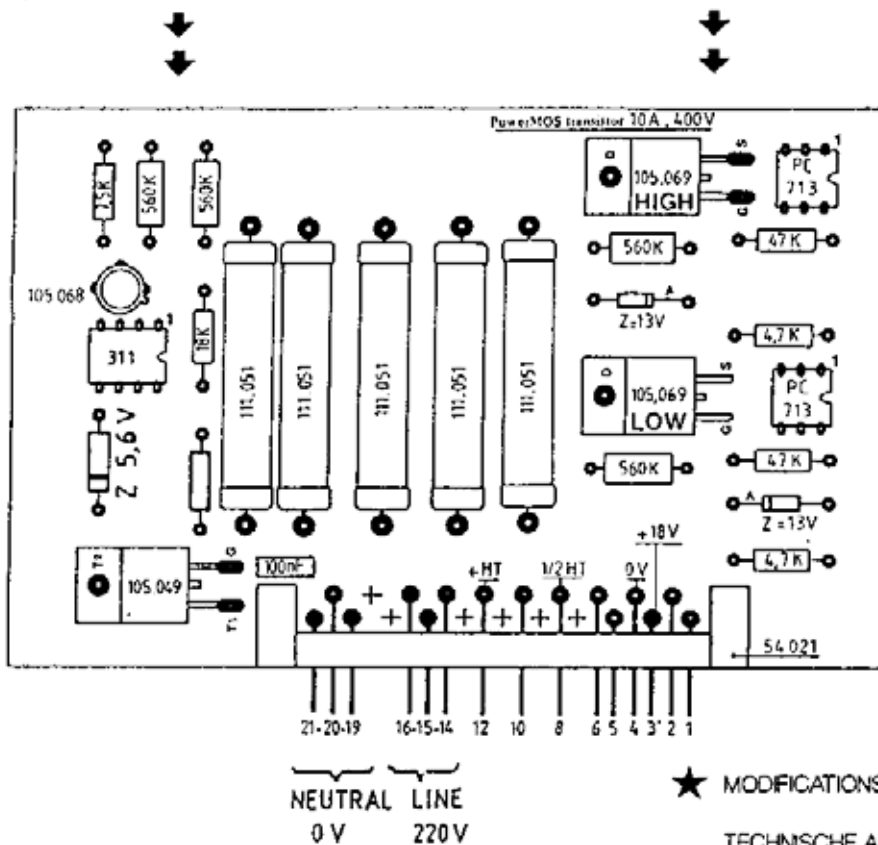
PB 4



TO 202-2

OVERVOLTAGE CROWBAR

BALANCE - DISCHARGE



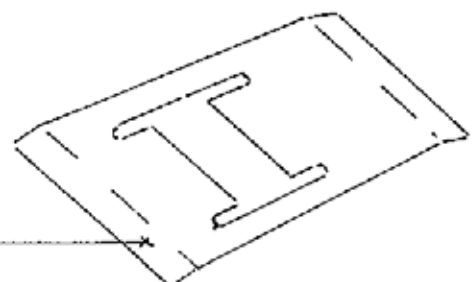
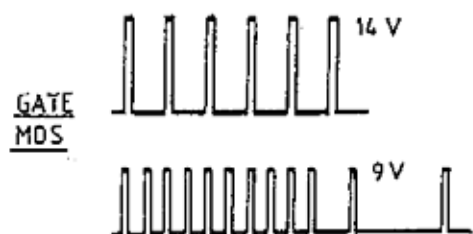
★ MODIFICATIONS AND IMPROVEMENT

TECHNISCHE AENDERUNGEN UND VERBESSERUNGEN

MODIFICATIONS & AMELIORATIONS TECHNIQUES

PART N°	QTY	SPECIFICATION
14805	1	PRINT
104.066	1	POLYESTER CAPACITOR 100 nF
105.006	1	ZENER DIODE 13 V
105.041	1	PHOTOCOUPLER PC713V SHARP
105.042	1	COMPARATOR LM 311N
105.049	1	TRIAC 25 A 800 V
105.068	1	VOLTAGE REF. 5 V
105.069	1	TRANSISTOR MOS IRF 740
111.051	5	OPEN-WOUND RESISTOR 5E 10 W
105.002	1	ZENER DIODE 5.6 V 1/2 W
121.183	1	RESISTOR 18 K
121.181	1	RES. 180 E
121.472	1	RES. 4.7 K
121.473	1	RES. 4.7 K
121.564	2	RES. 560 K 2500 V
121.752	1	RES. 7.5 K
14663	1	EXTRACTOR
203.003	2	NUT M3
210.002	1	TOOTHED LOCK WASHER
211.201	2	SCREW M 3 x 6
54.021	1	21 PM CONNECTOR
204.208	1	PVC INSULATOR

DISCHARGE

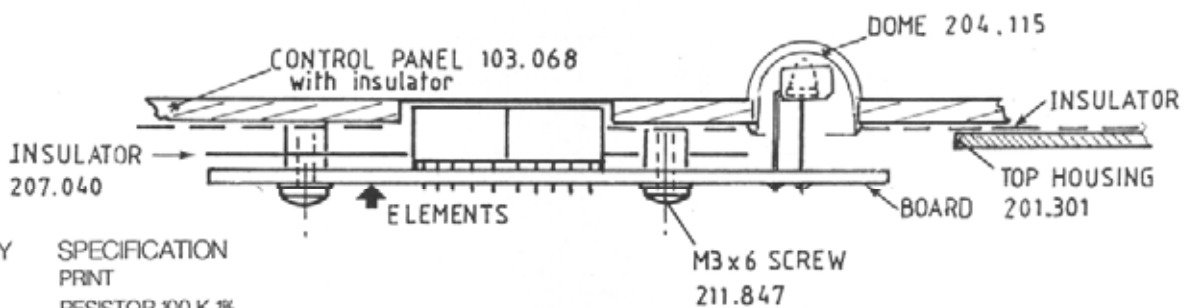
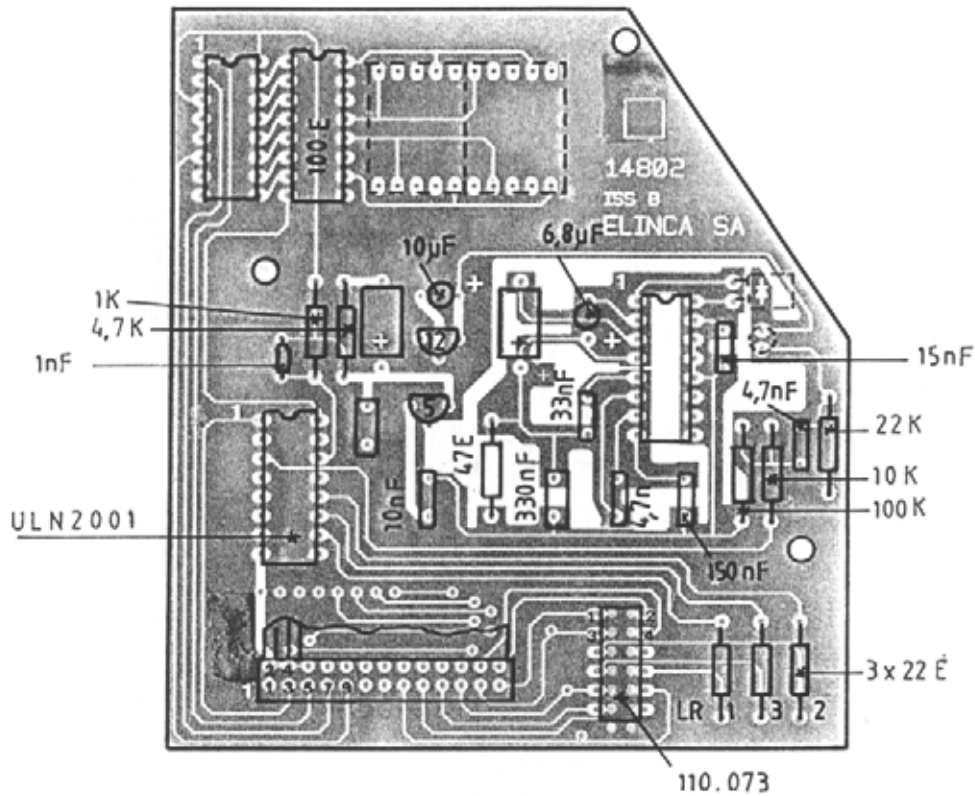


PB 5

ELINCHROM MICRO
CIRCUIT ASSEMBLY 14882

110V - VERSION

ISSUE 06.94

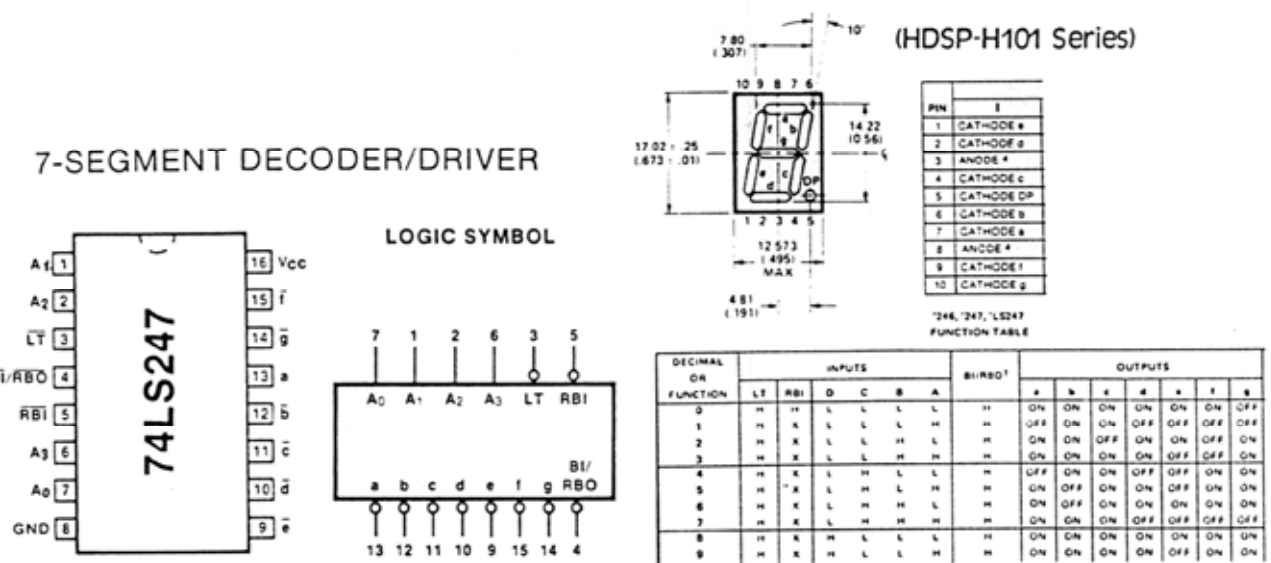
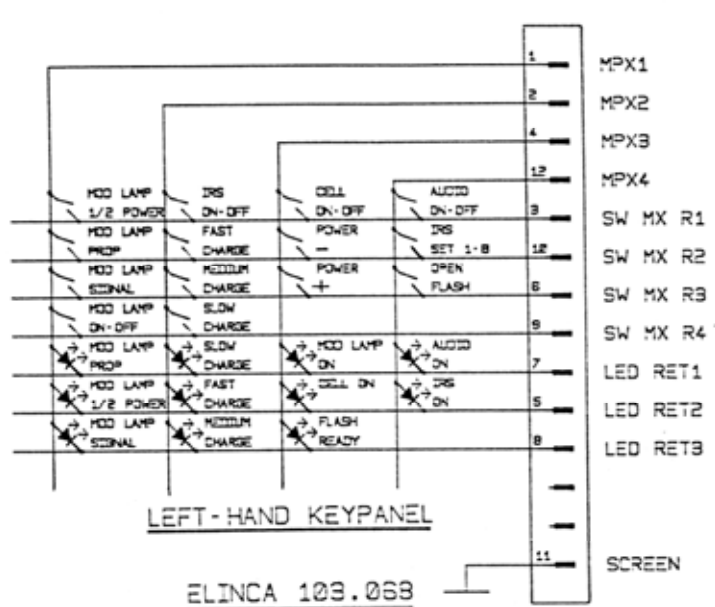
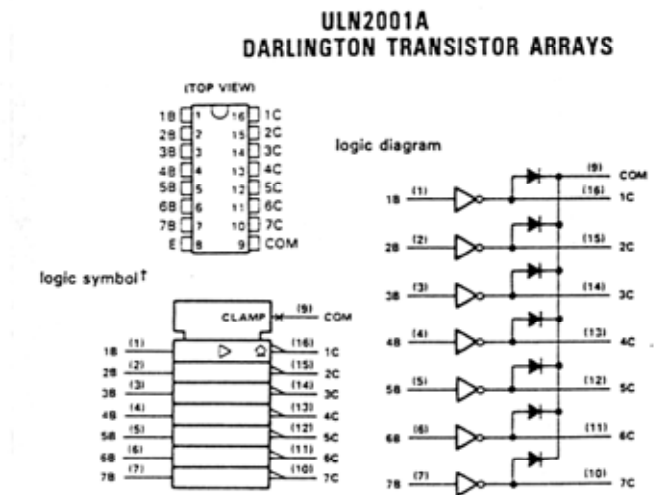
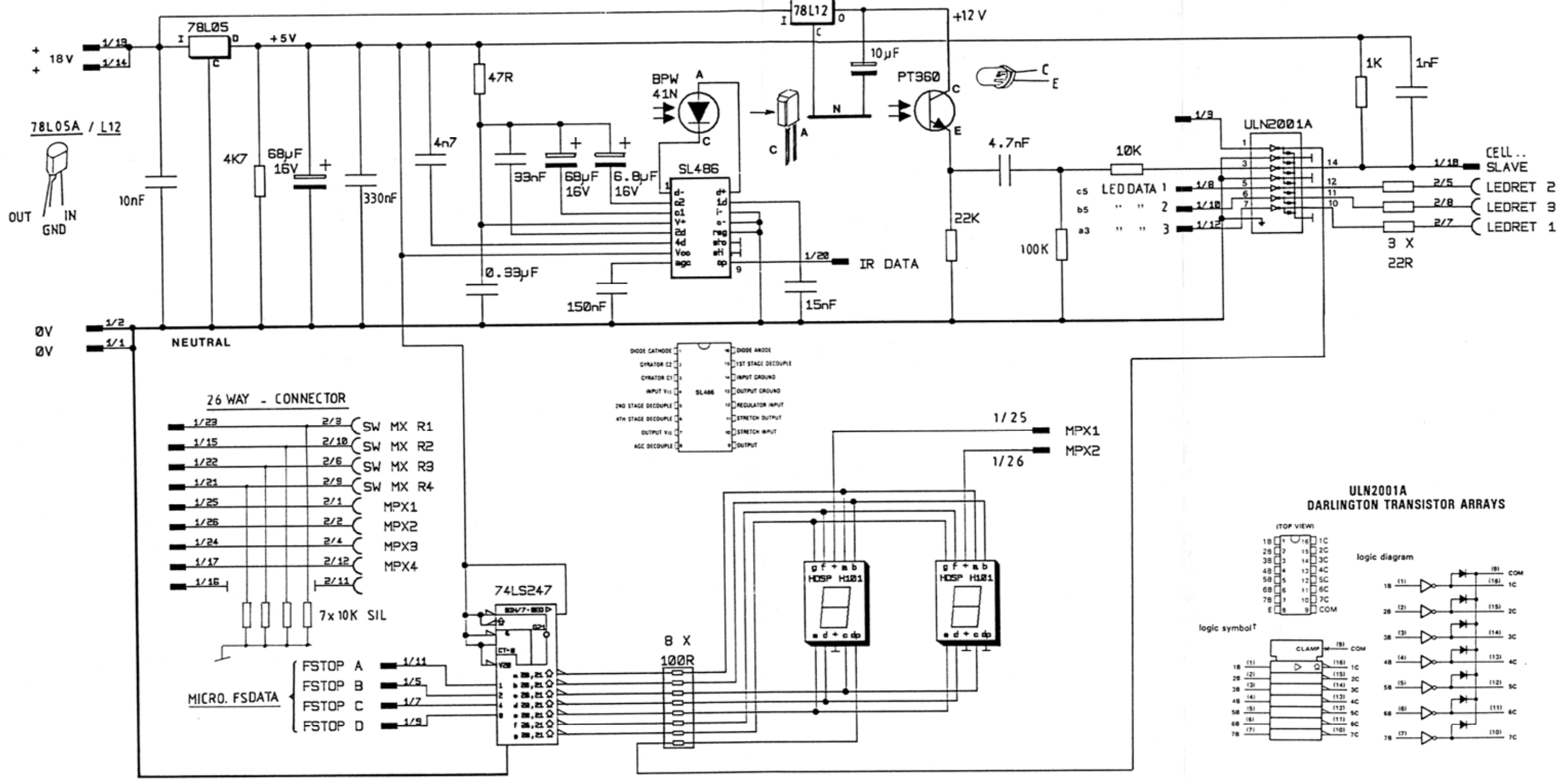


PART N°	QTY	SPECIFICATION
14802	1	PRINT
121.104	1	RESISTOR 100 K 1%
121.223	1	RES. 22 K
121.103	1	RES. 10 K
121.472	1	RES. 4.7 K
121.470	1	RES. 47 E
121.220	3	RES. 22 E
121.102	1	RES. 1K
105.060	1	IC BCD to 7-Seg. Dec/DrivSN74LS247
105.061	1	IC PREAMPLIFIER IR SL 486
105.062	1	IC DARL.ARRAY ULN 2001
105.054	1	REGULATOR 78 L 05 5 VOLT
105.063	1	REGULATOR 12 VOLT
140.29	1	PHOTOTRANSISTOR PT 361 SHARP
105.064	1	PHOTODIODE BPW 41N
105.065	2	7 SEG. DISPLAY
104.069	1	CAPACITOR 68 µF 16 V
104.078	1	TANTALE CAPACITOR 10 µF 16 V
104.070	1	TANTALE * 6.8 µF 16 V
104.064	1	POLYESTER CAPACITOR 330 nF
104.071	1	POLYESTER CAPA. 150 nF
104.072	1	POLYESTER CAPA. 33 nF
104.073	1	POLYESTER CAPA. 15 nF
104.074	1	POLYESTER CAPA. 10 nF
104.075	1	POLYESTER CAPA. 4.7 nF
104.060	1	CERAMIC CAPA. 1nF
111.604	1	RESISTOR ARRAY 7 x 10 K SIL
111.605	1	RESISTOR ARRAY 8 x 100 E DIL
110.073	1	CONNECTOR 12 pF
501.028	1	FLAT CABLE 26 P
207.040	1	PVC INSULATOR FOR PRINT

ELINCHROM MICRO CIRCUIT ASSEMBLY 14852

110V/220V - VERSION

ISSUE 06.94

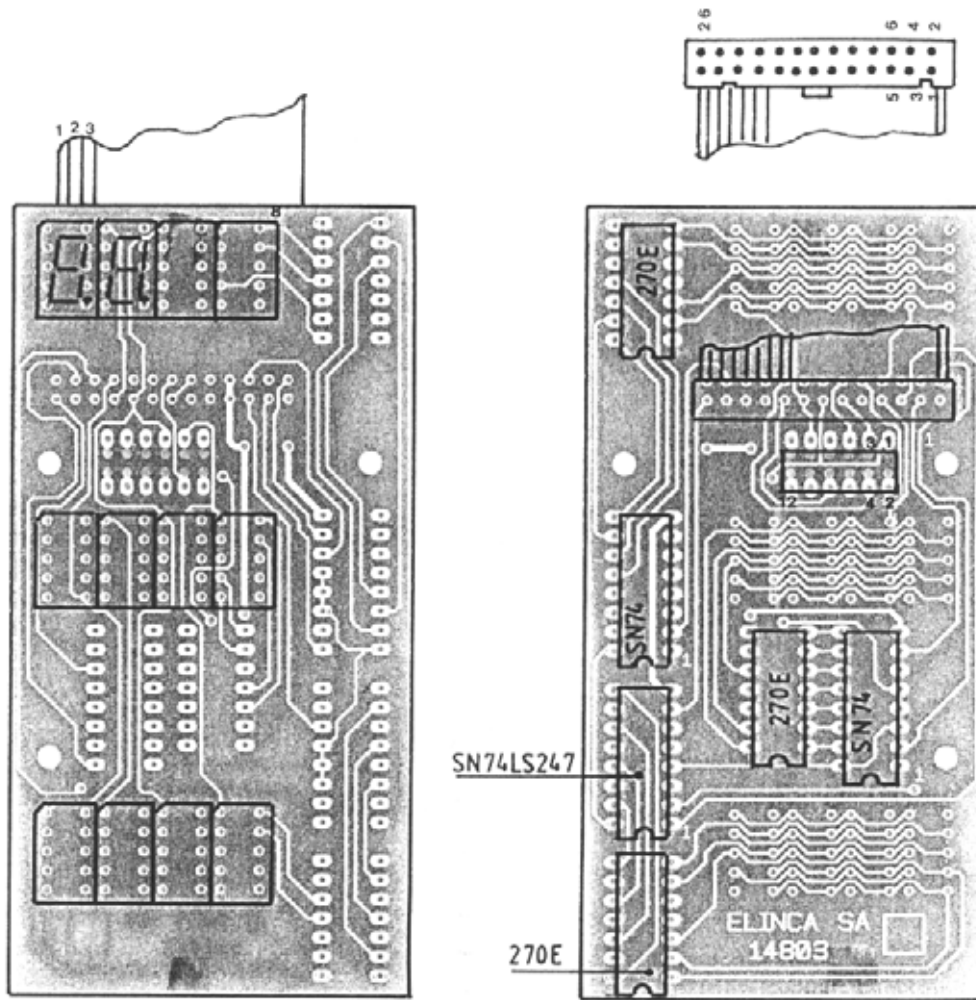


74LS247, LS247 FUNCTION TABLE

DECIMAL FUNCTION	INPUTS							OUTPUTS							
	LT	RBI	D	C	B	A	B1/RBO ¹	a	b	c	d	e	f	g	
0	H	H	L	L	L	L	H	ON	ON	ON	ON	ON	ON	OFF	
1	H	X	L	L	L	L	H	OFF	ON	ON	OFF	OFF	OFF	OFF	
2	H	X	L	L	H	L	H	ON	ON	OFF	ON	ON	OFF	ON	
3	H	X	L	L	H	H	H	ON	ON	ON	ON	OFF	OFF	ON	
4	H	X	L	H	L	L	H	OFF	ON	ON	OFF	OFF	ON	ON	
5	H	X	L	H	L	H	H	ON	OFF	ON	ON	OFF	ON	ON	
6	H	X	L	H	H	L	H	ON	ON	ON	OFF	OFF	OFF	OFF	
7	H	X	L	H	H	H	H	ON	ON	ON	ON	ON	ON	ON	
8	H	X	H	L	L	L	H	ON	ON	ON	ON	OFF	ON	ON	
9	H	X	H	L	L	H	H	ON	ON	ON	ON	ON	ON	ON	

FOR LEFT-HAND KEYPANEL

ELINCHROM MICRO
CIRCUIT ASSEMBLY 14852
SCHEMATIC DIAGRAM
110V/220V - VERSION

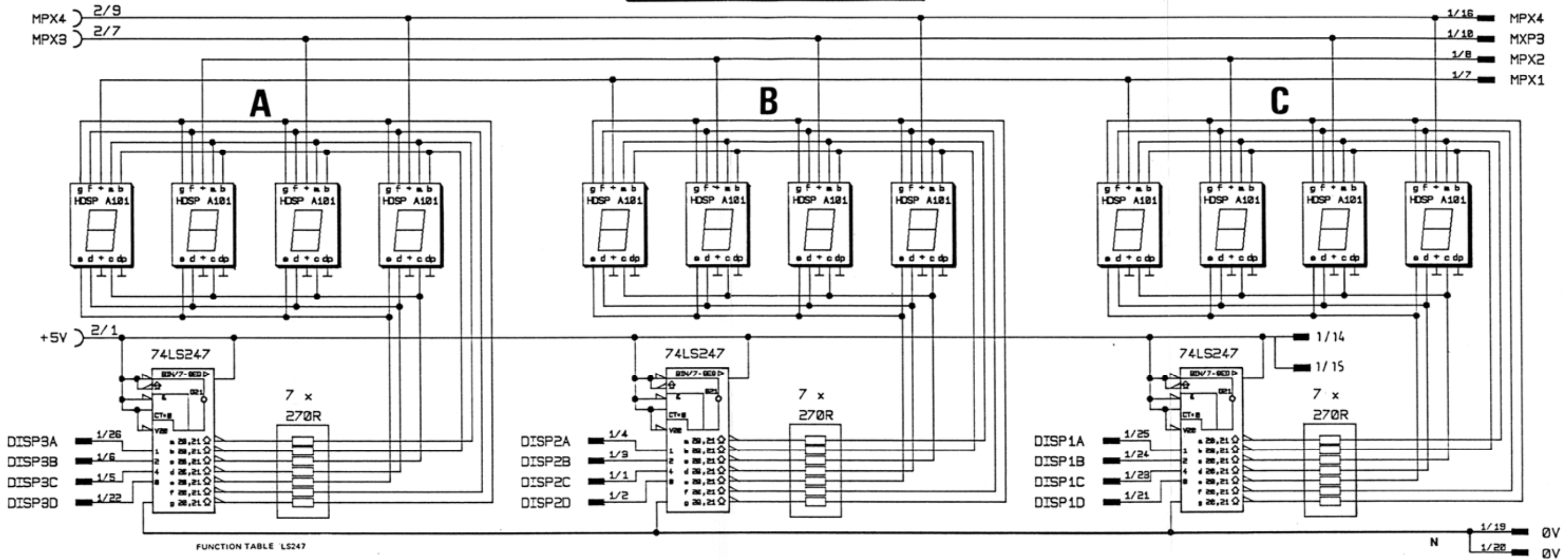


PARTS LIST

<u>Part No.</u>	<u>Specification</u>
105.060	IC DECODEUR SN74LS247
105.066	AFFICHAGE 7 SEG. LED
110.073	CONNECTEUR 12PF POUR C.I.
111.606	RESEAU RES. 7 X 270 Ω DIL
14803	C.I. 3-AFFICHEURS MICRO NU
501.029	CABLE PLAT 26P 49cm GENERATEUR

ELINCHROM MICRO
 CIRCUIT ASSEMBLY 14853
 110V/220V - VERSION

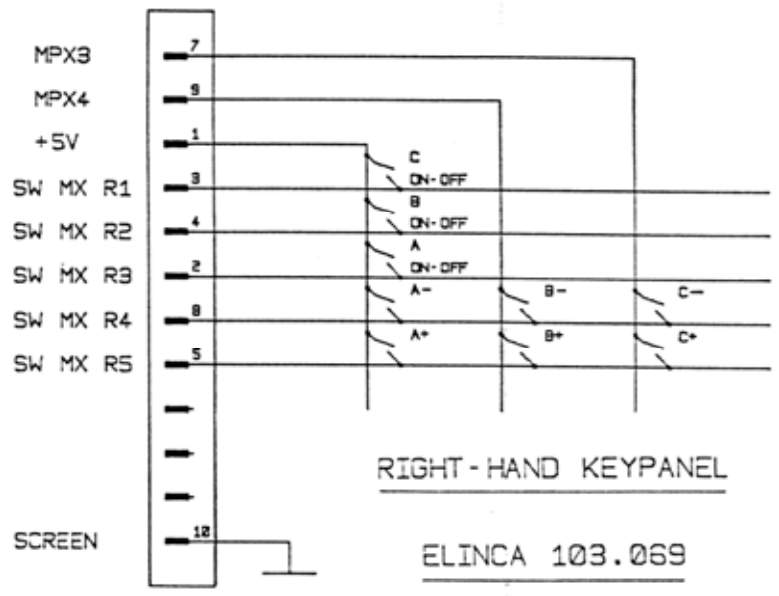
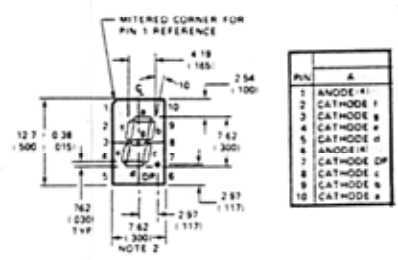
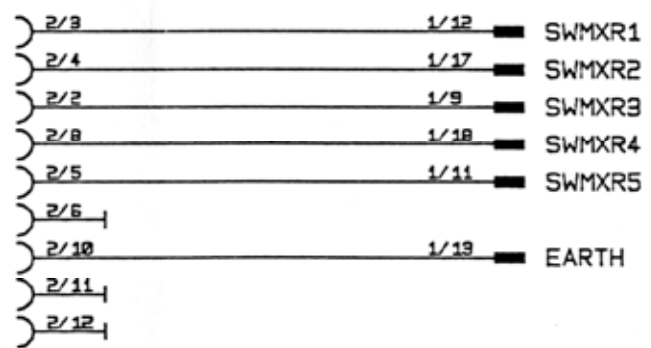
OUTLET ENERGY DISPLAYS



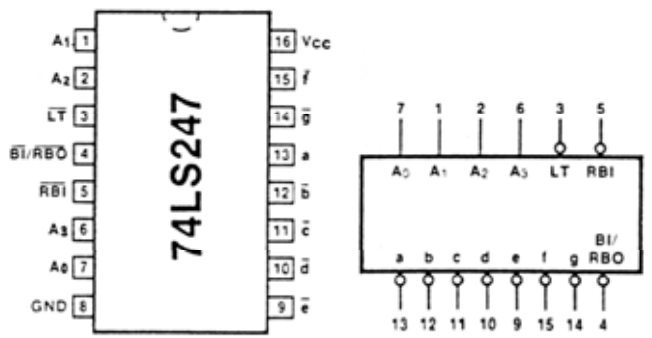
FUNCTION TABLE LS247

DECIMAL OR FUNCTION	INPUTS					BI/RBO ¹	OUTPUTS							
	LT	RBI	D	C	B		A	a	b	c	d	e	f	g
0	H	H	L	L	L	L	H	ON	ON	ON	ON	ON	ON	OFF
1	H	X	L	L	L	L	H	OFF	ON	ON	OFF	OFF	OFF	OFF
2	H	X	L	L	H	L	H	ON	ON	OFF	ON	ON	OFF	ON
3	H	X	L	L	L	H	H	ON	ON	ON	ON	ON	OFF	ON
4	H	X	L	H	L	L	H	OFF	ON	ON	OFF	OFF	ON	ON
5	H	X	L	H	H	L	H	ON	OFF	ON	ON	ON	ON	OFF
6	H	X	L	H	H	L	H	ON	ON	ON	ON	ON	OFF	OFF
7	H	X	L	L	H	L	H	ON	ON	ON	ON	ON	OFF	OFF
8	H	X	L	L	L	L	H	ON	ON	ON	ON	ON	ON	ON
9	H	X	L	L	L	H	H	ON	ON	ON	ON	ON	ON	ON

KEYBOARD 'B' CONNECTOR



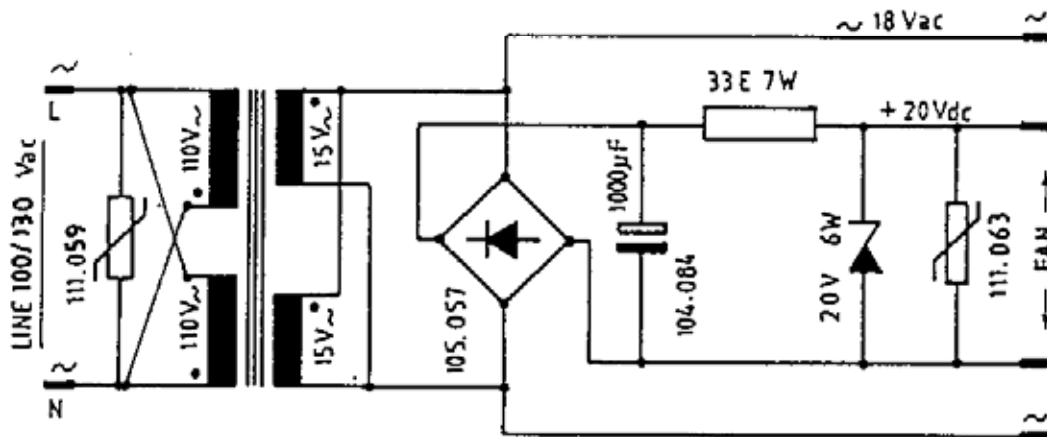
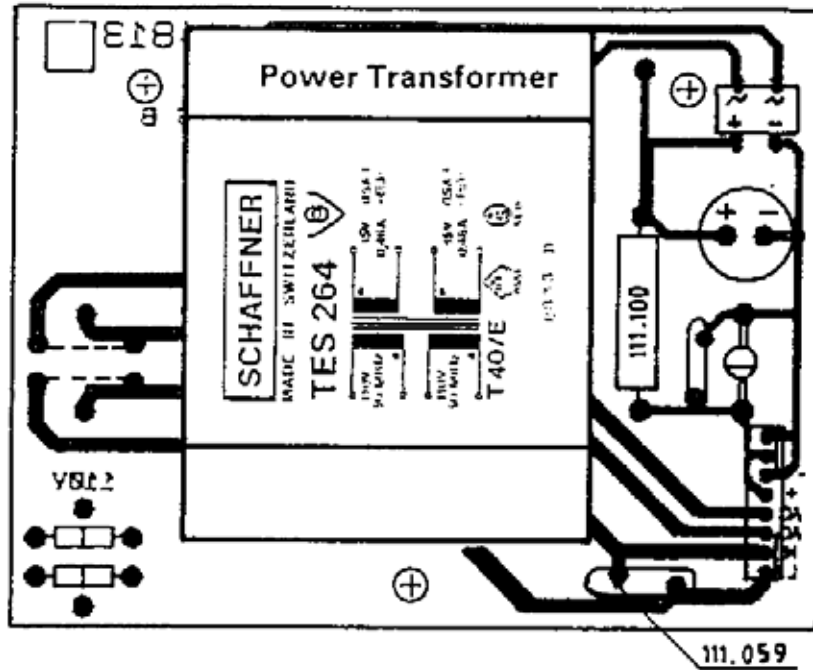
BCD TO 7-SEGMENT DECODER/DRIVER



FOR RIGHT-HAND KEYPANEL

**ELINCHROM MICRO
CIRCUIT ASSEMBLY 14853
SCHEMATIC DIAGRAM
110V/220V - VERSION**

Power Supply
 Netzteil
 Alimentation



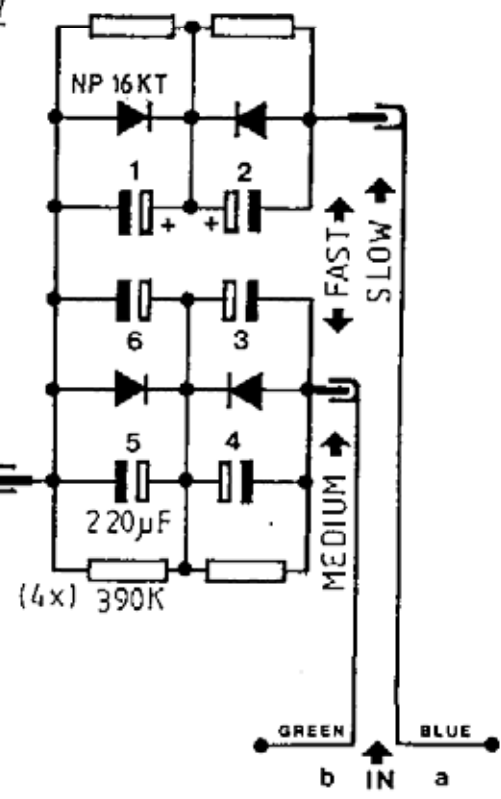
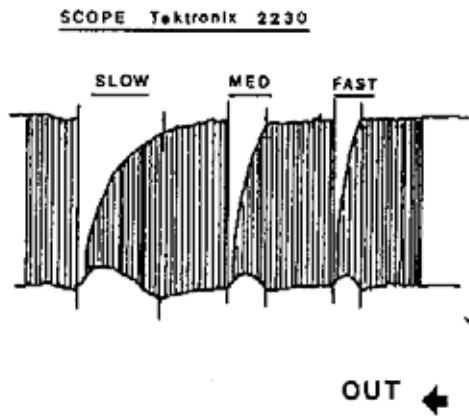
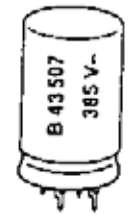
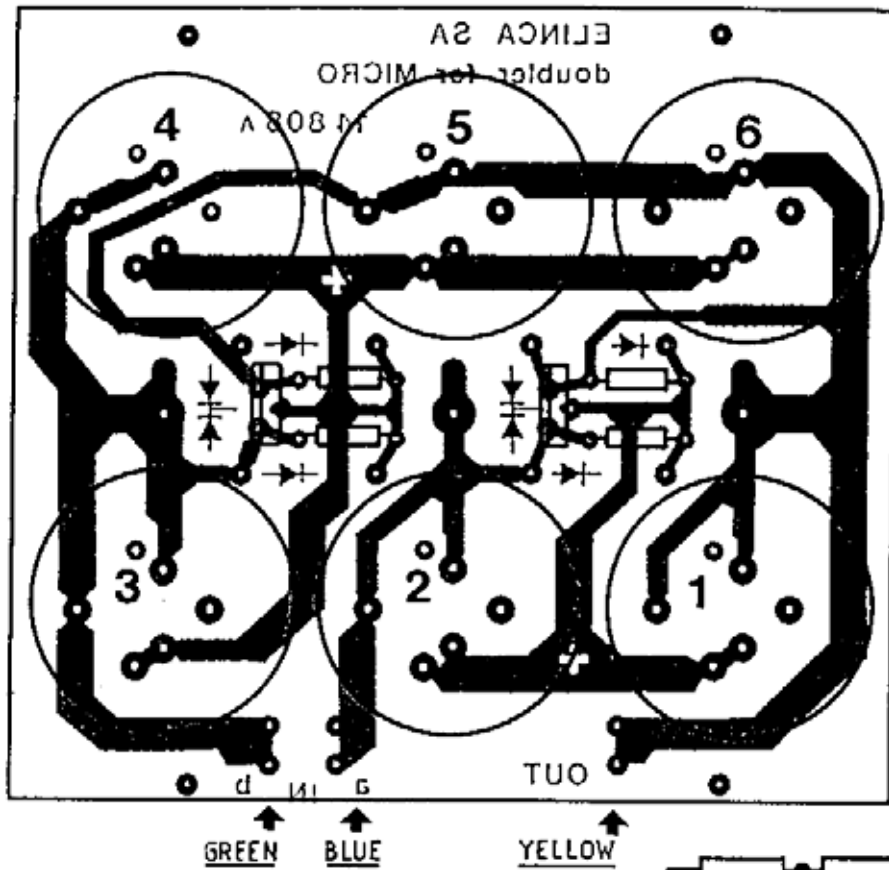
PART N°	QTY	SPECIFICATION
14813	1	PRINT
111.059	1	VARIATOR 140 VAC
100.052	1	TRANSFORMER 14 VA
104.084	1	CAPACITOR 1000 µF/25 V
105.057	1	RECTIFIER BRIDGE 400 V 1 A
105.088	1	ZENER DIODE 20 V 6 W
110.084	1	CONNECTOR 8 pM MOLEX
111.063	1	VARIATOR 25 VAC
111.100	1	RESISTOR 33 E 7 W
120.001	2	JUMPERS

ELINCHROM MICRO
 CIRCUIT ASSEMBLY 14864

110V - VERSION ISSUE 06.94

VOLTAGE DOUBLING CAPACITORS

FOR MICRO 110V - 2 BOARDS 14858 IN //



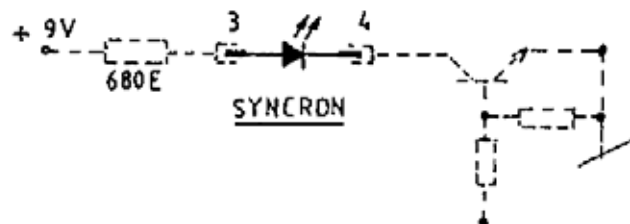
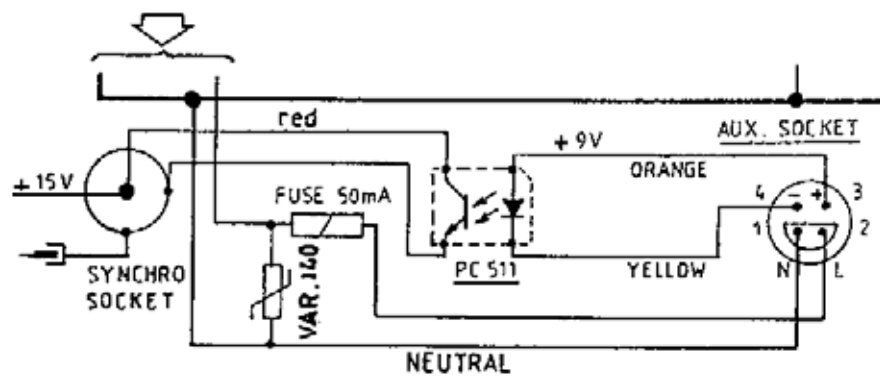
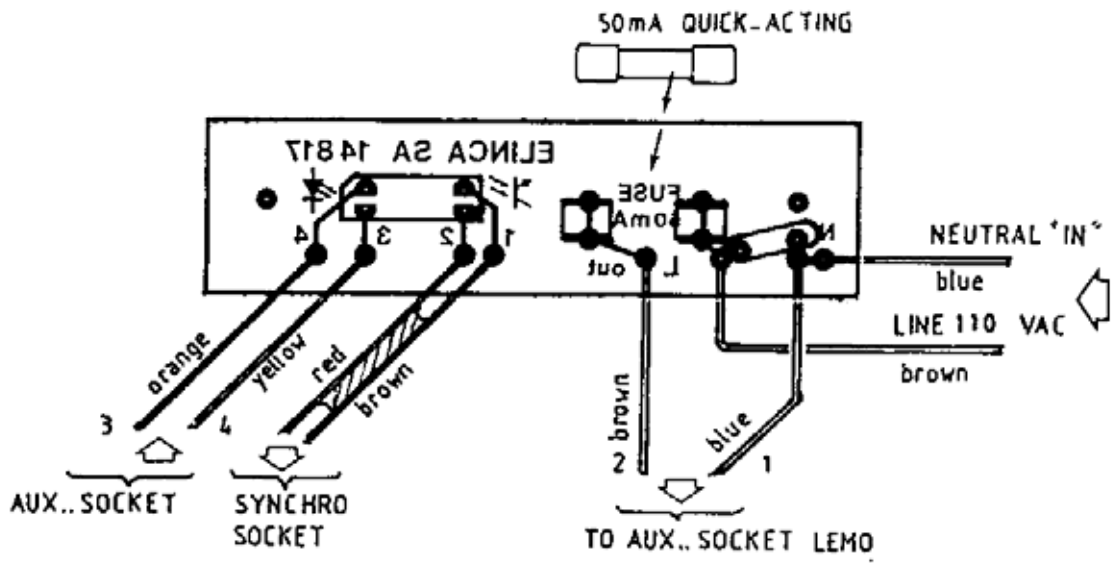
Part No.	Specification
14858	C.I. DOUBLEUR MICRO MONTE
14908	C.I. DOUBLEUR MICRO NU
121.394	RES. 390 K 1/2 W 350 V
105.058	DIODE DOUBLE 16A/800V
104.062	COND.ELECTROL.VERT. 220µF 385V
112.078	LANGUETTE PLATE 6,3MM ETACHEE
112.075	LANGUETTE PLATE 4,8MM ETACHEE
209.103	ENTRETOISE HEX. 14x10
203.032	BOURD A PARS COMBY H4

ELINCHROM MICRO
CIRCUIT ASSEMBLY 14858

110V/220V - VERSION

ISSUE 06.94

AUXILIARY SOCKET INTERFACE

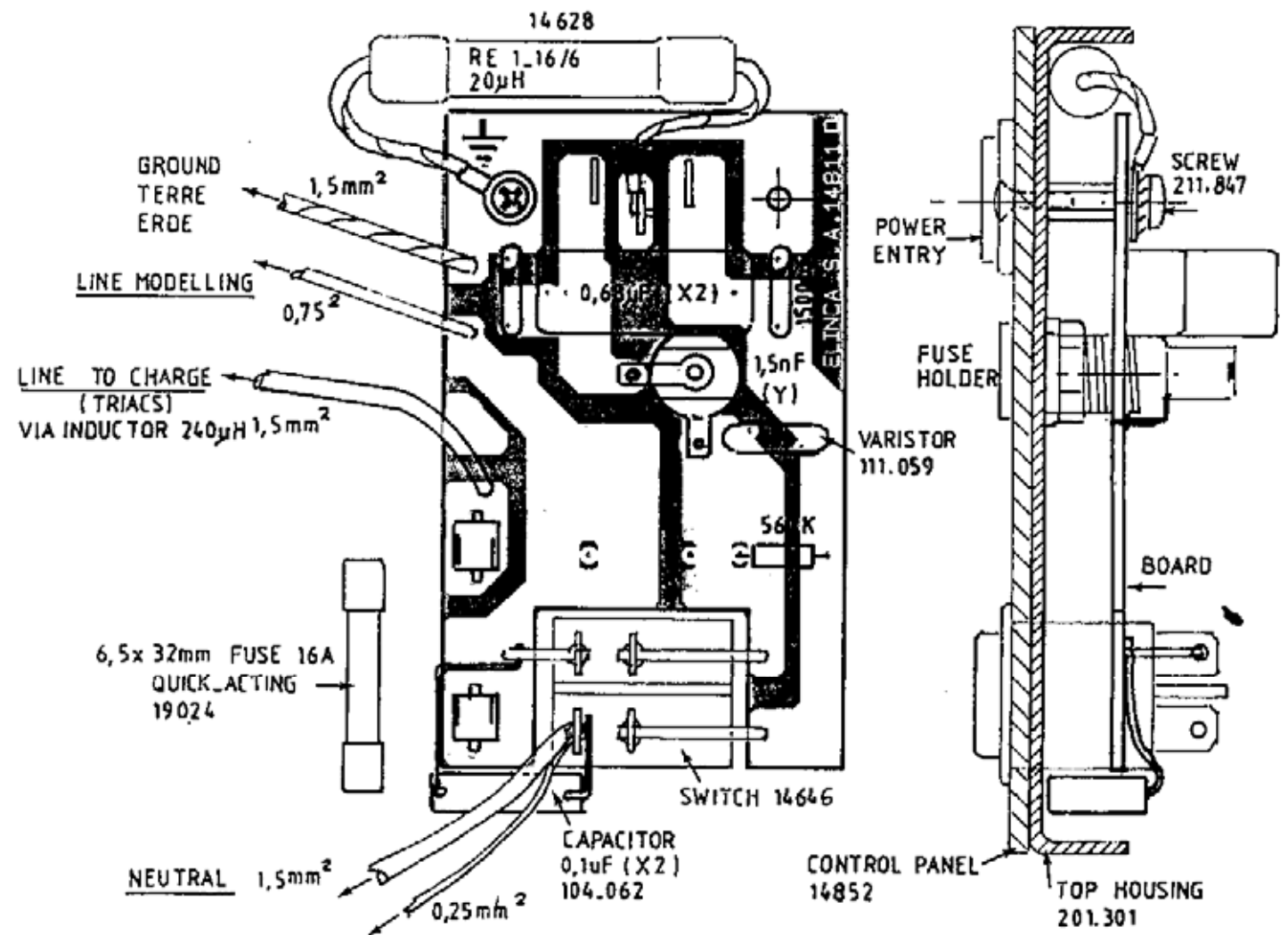


PART N°	QTY	SPECIFICATION
14817	1	PRINT
111.059	1	VARISTOR 140 VAC
106.039	2	SPRING FUSE HOLDER
106.040	1	FUSE 5x20 mm
105.053	1	PHOTOCOUPLER (PC 511) long creeping distance

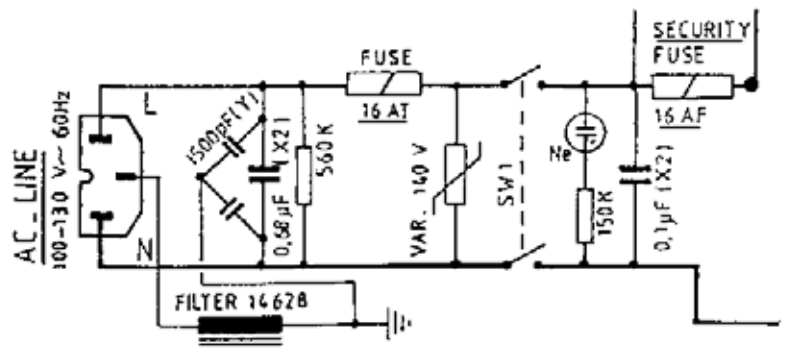
ELINCHROM MICRO
CIRCUIT ASSEMBLY 14868

110V - VERSION ISSUE 06.94

POWER ENTRY AC



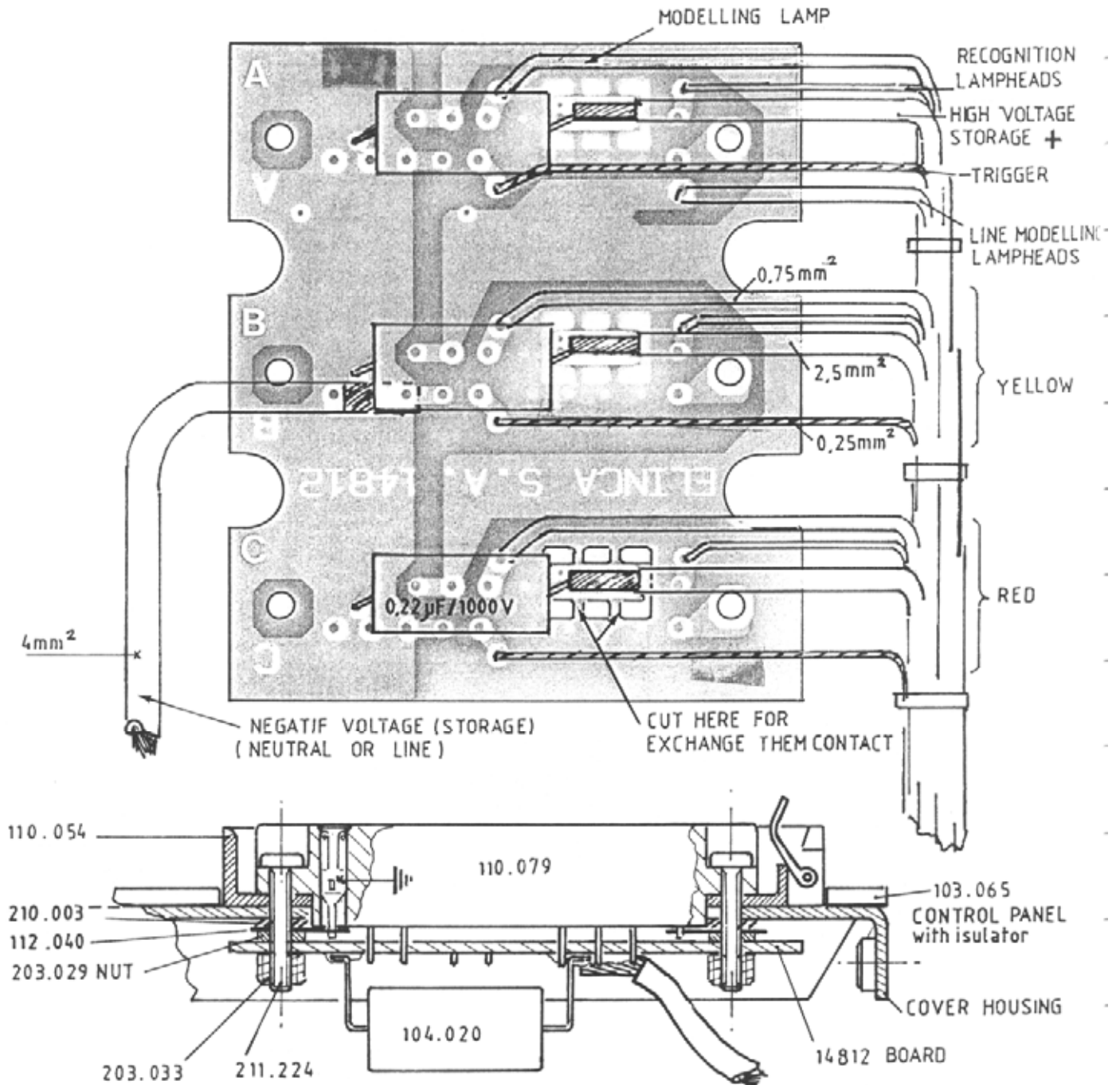
PART N	QTY	SPECIFICATION
14811	1	PRINT
121564	1	RESISTOR 560K/2500V
104.087	1	CAPACITOR 0,68 uF (X2)
104.088	2	CAPACITOR 1500 pF (Y)
111.059	1	VARISTOR 140 VAC
106.026	2	SPRING FUSE HOLDER
14628	1	EARTH LINE CHOKE 20 uH
112.080	1	COLLAR SLEEVE 5,4x2,5 mm
112.081	1	COLLAR SLEEVE 18x3 mm



ELINCHROM MICRO
CIRCUIT ASSEMBLY 14862

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ELINCHROM MICRO CIRCUIT SOCKETS



PARTS N°	DESCRIPTION
14812	PRINTED BOARD
104.020	CAPACITOR 0,22/1000V
110.079	SOCKET 20x FOR PRINT
110.054	RECEPTACLE SOCKET (EMBASSE)
211.224	FIXING SCREW M4x20
210.003	TOOTHED LOCK WASHER
112.040	FLAT TERMINAL CONNECTION
203.029	M4 NUT (metal)
203.033	M4 NUT (Polyamide)
500.027	STRANDED CONDUCTOR verseiltes Kabel (toron)

14812

PRINTED BOARD

110V/220V - VERSION