

HIGH RESOLUTION LEDBAR

**USER
MANUAL**

DNR

Geachte klant,

Wij danken u hartelijk voor uw keuze en het vertrouwen dat u in ons produkt stelt.
U deed een goede keus, dit produkt is ontworpen door en voor professionele gebruikers.

Er is gebruik gemaakt van onze enorme "know how" in mengtafel en signaal processor technieken en dit gekombineerd met hoogwaardige componenten geeft u de zekerheid van een lange gebruiksduur.

Bovenstaande eigenschappen resulteren in een zeer betrouwbaar en bedrijfszeker eindprodukt.

Deze gebruiksaanwijzing helpt u in het optimaal benutten van alle mogelijkheden die dit produkt in zich heeft.

*Wij excuseren ons voor het feit dat deze gebruiksaanwijzing uitsluitend in het engels verkrijgbaar is.
Dit is een gevolg van het feit dat 99% van onze produkten geëxporteerd worden en het engels de algemeen aanvaarde internationale voertaal is.*

Mocht u nog vragen hebben dan kunt u zich altijd tot onze dealers wenden.

Dear client,

Thank you for choosing this product.

This product is designed by specialists in the field of professional audio and is intended to be used as a professional tool.

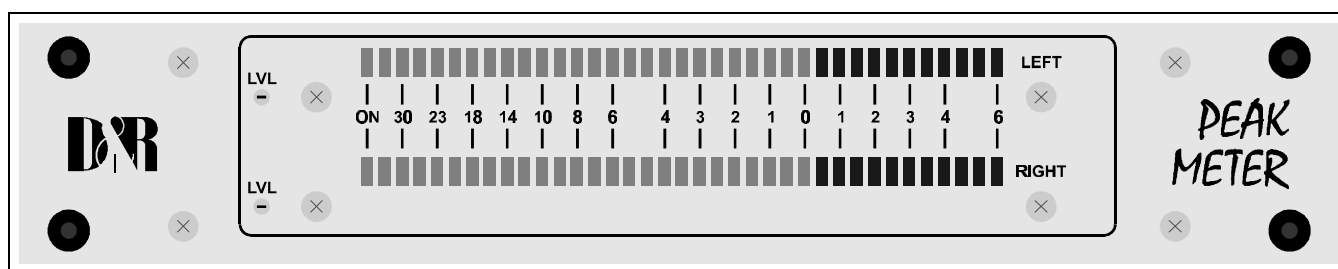
We are confident that you will be using this product for many years to come, and wish you much success.

We always value suggestions from our clients, and we would therefore be grateful if you could complete and return the questionnaire included at the back of this manual, once you have become familiar with this product. We will certainly learn from your comments, and very much appreciate your time doing this.

With kind regards,

Duco de Rijk
President

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Rijnkade 15B
1382 GS WEESP-HOLLAND
The Netherlands
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Fax: 0294-416 987
Website: <http://www.d-r.nl>
E-mail: info@d-r.nl



HI-RESOLUTION LEDBAR

Introduction

The '37 segment led bargraph meter is a professional dual audio peak level meter. It provides accurate readings between -35 up to +6 dB. Housed in a standard 9.5 inch stainless steel case, it has been designed to the demands to sustain intensive use in various environments.

Powering up

Before connecting the unit to the mains check for the appropriate voltage (see marker at the rear). The meter will deflect once and then settles. The bottom led indicates that power is connected and that the meter is "on". If at any time, this led is not lit (when the unit is connected to the mains), you should disconnect the unit and contact D&R for service advice.

The two 6.3 mm jack terminals are used as inputs, left and right. This is where the audiosignal must be connected (Tip: signal; sleeve: not used; ring: ground). Once connected to the audio source the meter will display peak levels between -35 up to +6 dB in 36 steps.

Level adjustment

Level adjustments can be made, using the trimpot positioned at the bottom of each bargraph meter. Turning the potmeter clockwise increases the level, counter clockwise decreases the level. For instance, adjusting the level at 0 dB means turning the potmeter clockwise until the 0 dB led just lites.

Default settings for both channels are at 0 dB when the actual input is a +4 dB signal (sinewave). Measuring +4 dB output level with an AC voltmeter would give a 1.22 Volt AC reading.

Specifications:

levelrange:	-35dB to +6 dB
Frequency range:	10-60.000 Hz
Power consumption:	50mA/230VAC max.
Input impedance:	22kΩ

NOTE: before use read the safety instructions on the separate sheet very.

DECLARATION OF CONFORMITY

Manufacturers Name: D&R Electronica Weesp b.v.

Manufacturers Address: Rijkade 15B,
1382 GS Weesp,
The Netherlands

declares that the product

HIGH RESOLUTION LEDBAR

conforms to the following product specifications:

EMC: **EN 55022: 1987**
CISPR 22 (1993) class B

EN 500082-1 (1992)

Supplementary Information:

The products herewith complies with the requirements of the EMC Directive 89/336/EEC (1989) as amended by the CE Marking Directive 93/68/EEC (1993).

D&R Electronica Weesp b.v.
Rijkade 15 B
1382 GS WEESP
The Netherlands
President of Engineering

PRODUCT SAFETY

This product is manufactured with the highest standards and is double checked in our quality control department for reliability in the "HIGH VOLTAGE" section.

CAUTION

Never remove any panels, or open this equipment. No user servicable parts inside.
Equipment power supply must be grounded at all times.
Only use this product as described, in user manual or brochure.
Do not operate this equipment in high humidity or expose it to water or other liquids.
Check the AC power supply cable to assure secure contact.
Have your equipment checked yearly by a qualified dealer service center.
Hazardous electrical shock can be avoided by carefully following the above rules.

EXTRA CAUTION FOR LIVE SOUND

Ground all equipment using the ground pin in the AC power supply cable.
Never remove this pin. Ground loops should be eliminated only by use of isolation transformers for all inputs and outputs. Replace any blown fuse with the same type and rating only after equipment has been disconnected from AC power.
If problem persists, return equipment to qualified service technician

PLEASE READ THE FOLLOWING INFORMATION

Especially in sound equipment on stage the following information is essential to know.
An electrical shock is caused by voltage and current, actually it is the current that causes the shock. In practise the higher the voltage the higher the current will be and the higher the shock.
But there is another thing to consider and it is resistance.
When the resistance in Ohms is high between two poles, the current will be low and vica versa.
All three of these; voltage, current. and resistance are important in determining the effect of an electrical shock.
However, the severity of a shock primarily determined by the amount of current flowing through a person.
A person can feel a shock because the muscles in a body respond to electrical current and because the heart is a muscle it can affect, when the current is high enough.
Current can also be fatal when it causes the chest muscles to contract and stop breathing. At what potential is current dangereous.
Well the first feeling of current is a tingle at 0.001 Amp of current.
The current between 01 Amp and 0.2 Amp is fatal.
Imagine that your home fuses of 20 Amp can handle 200 times more current than is necessary to kill. How does resistance affect the shock a person feels.
A typical resistance between one hand to the other in "dry" condition could well over 100,000 Ohm.

If you are playing on stage your body is perspiring extensively and your body resistance is lowered by more than 50%. This is a situation in which current can easily flow.

Current will flow when there is a difference in ground potential between equipment on stage and in the P.A. system. Please do check if there is any potential between the housing of the mikes and the guitarsynth amps, which will be linked by your body on stage. Imagine, a guitar in your hand and your lips close to the mike! A ground potential difference of above 10 volts is not unusual, in improperly wired buildings it can possibly be as high as 240 volts.

Although removing the ground wire sometimes cures a system hum, it will create a very hazardous situation for the performing musician.

Always earth all your equipment by the grounding pin in your mains plug.

Hum loops should be only cured by proper wiring and isolation input/output transformers.

Replace fuses always with the same type and rating after the equipment has been turned off and unplugged. If the fuse blows again you have an equipment failure, do not use it again and return it to your dealer for repair.

And last but not least be careful not to touch a person being shocked as you, yourself could also be shocked. Once removed from the shock, have someone send for medical help immediately

Always keep the above mentioned information in mind when using electrically powered equipment.

Dear CLIENT,

We care very much about your opinion of our product, and would very much appreciate if you could complete the following questionnaire, and return it to the address below.

Please use a copy of this form if you do not want to damage your manual.

USER NAME

ORGANIZATION

ADDRESS

TOWN

POST CODE

COUNTRY

EMAIL: info@d-r.nl.....

PURCHASING DATE:

CONFIGURATION

DEALER

HOW DID YOU HEAR ABOUT THIS PRODUCT? (please circle)

(Dealer / Advertisement / Exhibition / Other user / Other)

WHAT JOURNALS DO YOU TAKE ON A REGULAR BASIS?

.....
WHAT IS YOUR OPINION OF THE PRICE/QUALITY OF THE 'AIRLAB'?

.....
WHAT PRICE WOULD YOU CONSIDER SUITABLE FOR THE 'AIRLAB'?

.....
ANY OTHER SUGGESTIONS?

.....
I REQUIRE INFORMATION ABOUT

.....
WHAT OTHER EQUIPMENT DO YOU USE?

.....
PLEASE SEND/FAX TO:

D&R Electronica Weesp bv, Rijnkade 15B, 1382 GS WEESP, The Netherlands FAX: +31 294 416987

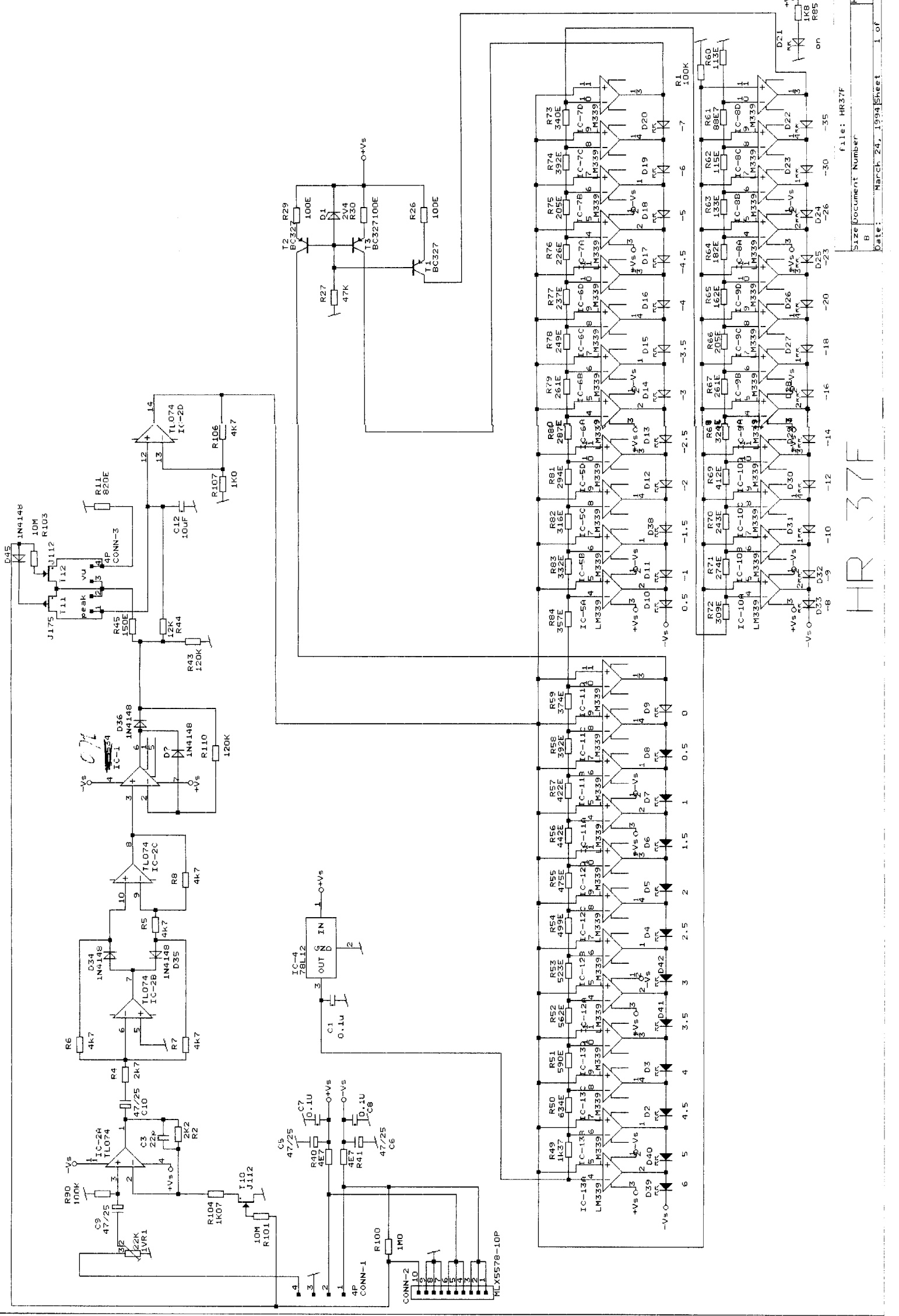
HIGH RESOLUTION LEDBAR

SERVICE MANUAL

60898532 Ledbar 37segm. ST+PS

Articlecode	Description	Quantity	Units
10250346	Brugcel B80C1500 (rechthoekig)	1.0000	st
10400216	Condensator ker 18p R2.5	2.0000	st
10401241	Condensator ker 100nF/50V R5 T	10.0000	st
10600180	Conn 2p 5mm netaansluiting	2.0000	st
10250342	Diode 1N4148 (signaal)	10.0000	st
10400284	Elco 1OuF 50V radiaal R5.0	2.0000	st
10400287	Elco 47uF 25V radiaal R5.0	8.0000	st
10400297	Elco 100OuF 40V axiaal	2.0000	st
10250338	Fet J112 (N-channel switch)	4.0000	st
10250017	Fet J175 (P-channel switch)	2.0000	st
10600512	Header 4p 2.54 lock recht	4.0000	st
10600478	Header 4p 2.54 recht	2.0000	st
10600452	Header 1Op 2.54 haaks	2.0000	st
10250320	Ic 7815 T0220 Toshiba volt.reg	1.0000	st
10250325	Ic 78L12 T092 SGS (volt.reg)	2.0000	st
10250321	Ic 7915 T0220 SGS (volt.reg)	1.0000	st
10250316	Ic LM-339 (comparator)	18.0000	st
10250306	Ic NE-5534 AP TI(single-opamp)	2.0000	st
10250305	Ic TL-074 CN TI (quad-opamp)	2.0000	st
10600394	Ic-voet 8 pins (vork-contact)	2.0000	st
10600395	Ic-voet 14 pins (vork-contact)	20.0000	st
10300166	Instelpot 15-turn 20k (T18)	2.0000	st
10600432	Jack chassis break	2.0000	st
10720662	Koelprof KL-169/SW TO-220	2.0000	st
10200011	Print Hi-Res ledbar-37F segm	2.0000	st
10200782	Print PS ledbar 1OVA	1.0000	st
10950579	Printrafo 1OVA 2x15volt vlak	1.0000	st
10600414	Shunt 2p (mini-jumper)	2.0000	st
10250333	Transistor BC-327/25 (pnp)	6.0000	st
10350517	Weerstand OE 5% 1/4W	3.0000	st
10350765	Weerstand 1mO 5% 1/4W	2.0000	st
10350729	Weerstand 1kO 5% 1/4W	2.0000	st
10350829	Weerstand 1k07 1% 1/4W	2.0000	st
10350830	Weerstand 1k21 1% 1/4W	2.0000	st
10350832	Weerstand 1k37 1% 1/4W	2.0000	st
10350833	Weerstand 1k50 1% 1/4W	2.0000	st
10350579	Weerstand 1k65 1% 1/4W	2.0000	st
10350732	Weerstand 1k8 5% 1/4W	2.0000	st
10350834	Weerstand 1k82 1% 1/4W	2.0000	st
10350836	Weerstand 2k15 1% 1/4W	2.0000	st
10350733	Weerstand 2k2 5% 1/4W	2.0000	st
10350838	Weerstand 2k37 1% 1/4W	2.0000	st
10350905	Weerstand 2k67 1% 1/4W	2.0000	st
10350734	Weerstand 2k7 5% 1/4W	2.0000	st

Articlecode	Description	Quantity	Units
10350842	Weerstand 3k01 1% 1/4W	2.0000	st
10350704	Weerstand 4E7 5% 1/4W	4.0000	st
10350737	Weerstand 4k7 5% 1/4W	10.0000	st
10350776	Weerstand 10MO 5% 1/4W	4.0000	st
10350742	Weerstand 12k 5% 1/4W	2.0000	st
10350749	Weerstand 47k 5% 1/4W	2.0000	st
10350911	Weerstand 64E9 1% 1/4W	6.0000	st
10350809	Weerstand 88E7 1% 1/4W	2.0000	st
10350810	Weerstand 100E 1% 1/4W	2.0000	st
10350717	Weerstand 100E 5% 1/4W	8.0000	st
10350753	Weerstand 100K 5% 1/4W	4.0000	st
10350854	Weerstand 115E 1% 1/4W	2.0000	st
10350754	Weerstand 120K 5% 1/4W	4.0000	st
10350805	Weerstand 133E 1% 1/4W	2.0000	st
10350719	Weerstand 150E 5% 1/4W	2.0000	SI
10350906	Weerstand 158E 1% 1/4W	2.0000	st
10350847	Weerstand 182E 1% 1/4W	2.0000	st
10350812	Weerstand 205E 1% 1/4W	4.0000	st
10350885	Weerstand 237E 1% 1/4W	2.0000	st
10350813	Weerstand 261E 1% 1/4W	4.0000	st
10350890	Weerstand 294E 1% 1/4W	2.0000	st
10350892	Weerstand 340E 1% 1/4W	2.0000	st
10350894	Weerstand 374E 1% 1/4W	2.0000	st
10350895	Weerstand 422E 1% 1/4W	2.0000	st
10350897	Weerstand 475E 1% 1/4W	2.0000	st
10350898	Weerstand 499E 1% 1/4W	2.0000	st
10350822	Weerstand 536E 1% 1/4W	2.0000	st
10350792	Weerstand 604E 1% 1/4W	2.0000	st
10350824	Weerstand 681E 1% 1/4W	2.0000	st
10350825	Weerstand 768E 1% 1/4W	2.0000	st
10350728	Weerstand 820E 5% 1/4W	4.0000	st
10350826	Weerstand 866E 1% 1/4W	2.0000	st
10350828	Weerstand 976E 1% 1/4W	2.0000	st
10990675	Zekeringhouder print + kap	1.0000	st
10250340	Zenerdiode 2V4 / 400mW	2.0000	st
10600158	Conn: 4p wrd: 2U084-016-0387	2.0000	st
10800924	Doos Randapparatuur 9.511	1.0000	st
10100042	Front 9.511 Hi-Res 37seg ledB/B	1.0000	st
10150093	Kast 9.511 1HE version D	1.0000	st
10250391	Led 5x2mm green SLB-0272P0-030	52.0000	st
10250392	Led 5x2mm red SLB-0275P0-030	22.0000	st
10600493	Netsnoer 3 aderig soldeer	1.0000	st
10700690	Platstaf 25 x 10 x 10mm	4.0000	st
10700611	Popnagel 3.0 x 6.5 blank	8.0000	st
20850011	Print bestukt 37 segm ledbar	2.0000	st
20851188	Print bestukt PS Ledbar 10VA	1.0000	st
10800956	Schuimblok 9.511	2.0000	st
10700787	Taptite M3x6 bolkopozidr/zwrt	4.0000	st
10700691	Trekontlasting voeding rond	1.0000	st

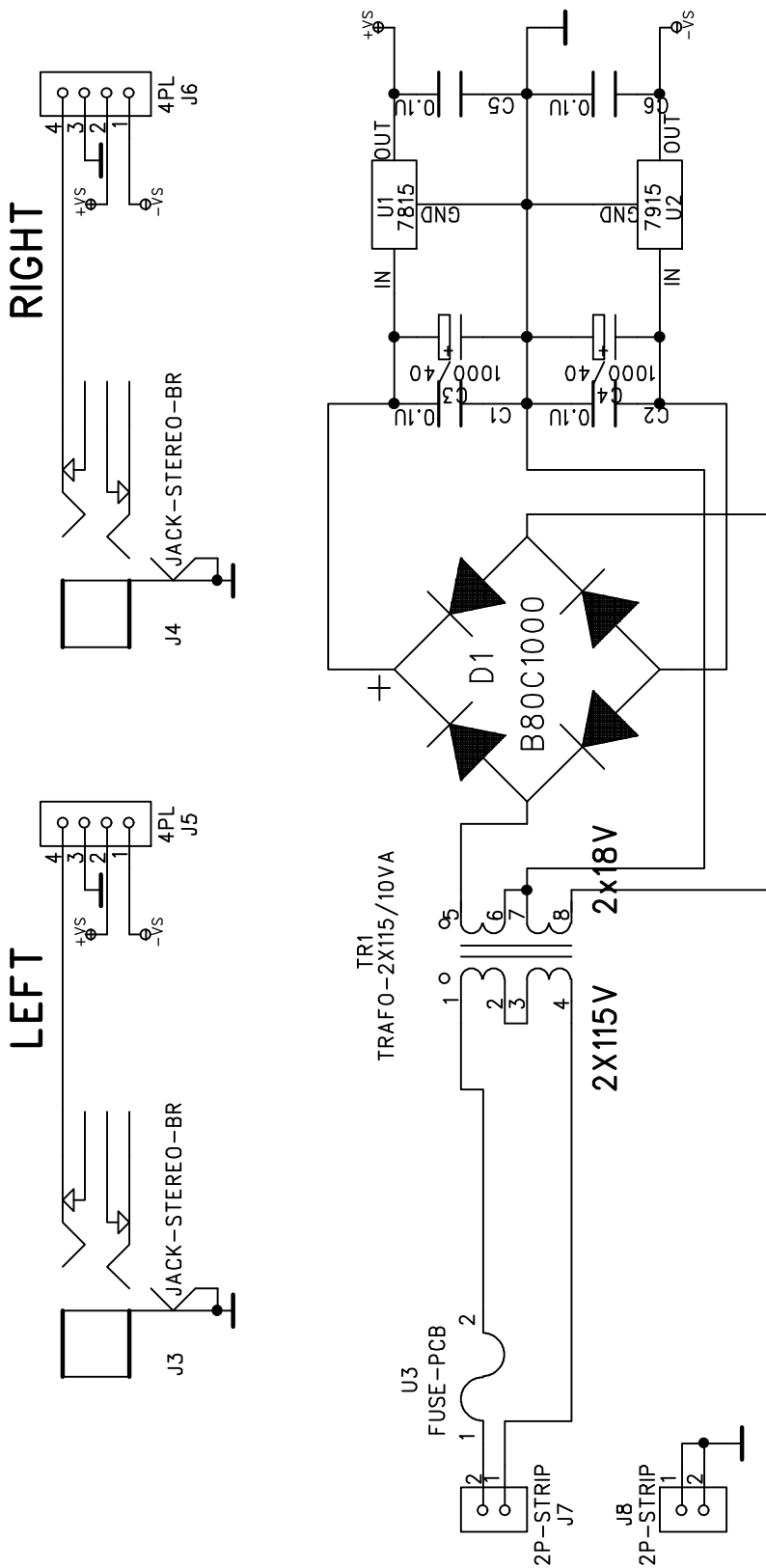


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Date: March 24, 1994 Sheet 1 of 1

HR 37F



Project: 9.5" Voeding	
Title: PS10VA.sch	
Date: 26-04-1996	Rev: A
Sheet: 1	of 1
Design: Duco de Rijk	



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