"NOISE GATE"

USER MANUAL

manufacturer of: recording - broadcast - p.a. - mixingdesks - signal processors

NOISE GATE manual

The noise gate is a device for the suppression or eliminating of background noise, interference,etc. At the same time this gate can be keyed by an external audio signal which is fed into the key input. The gating is then dependent of the external signal connected to the key input.
Many additional possibilities will become clear by using the unit.

Function of the controls.

* At the right hand side of the unit is a red led which lights when the gate shuts down.This led goes off when the gate opens.

* The attenuation knob controls the amount of background attenuation when the gate is closed(0 to -60 dB)

* The release knob sets the moment the gate closes.

* The attack knob sets the speed of opening the gate.

* The threshold control determines the level at which the gate opens and closes.

* The key button disconnects the side chain from the input of the gate to an extra jack input on the back. It is now possible to activate the gate from another source.

* The on pushbutton connects the input directly to the output,while still driving the side chain of the gate.

SETTING UP PROCEDURE

Connect a signal to the input jack and feed your equipment from the output jack. Turn all the controls fully anticlockwise and set the key and on pushbuttons to their up positions.
Now turn the threshold control slowly clockwise untill you hear the signal. Adjust the threshold very carefully so there is no difference between the gated and non gated sound. To open the gate longer turn up the release control.
The setting of the attack control will be dependant upon the dynamic characteristics of the signal (drums do need a faster attack than bassguitars).

NOTE!

READ THE SAFETY INSTRUCTIONS VERY CAREFULLY ON THE BACK PAGE!

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 VERY CAREFULLY.

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 0.1 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.

Allthough removing the ground wire sometimes cures a system hum, it will create a very hazardeous 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 propr 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 carefull 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

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

D&R ELECTRONICA B.V. WEESP

Conformity statement according to ISO/IEC Nr. 22 and EN 45014

Name Manufacturer	**D&R Electronica Weesp b.v.**
Addres manufacturer	**Rijnkade 15B,** **1382 GS Weesp,** **The Netherlands**

declares that this product

Name product	**Noise gate**
Modelnumber	**n.a.**
Produktoptions	**All**

passed the following product specifications:

Security	**EN 60950: 1988 +A1, A2**
EMC:	**CISPR-22: 1985 / EN 55022: 1988 class B (*)** **EN 50082-1: 1992** **IEC 801-2:1991 / prEN 55024-2:1992 - 3kV CD, 8kV AD** **IEC 801-3:1984 / prEN 55024-3:1991 - 3 V/m** **IEC 801-4:1988 / prEN 55024-4:1992 - 0.5kV signalcables, 1 kV powercables.**

Extra information:

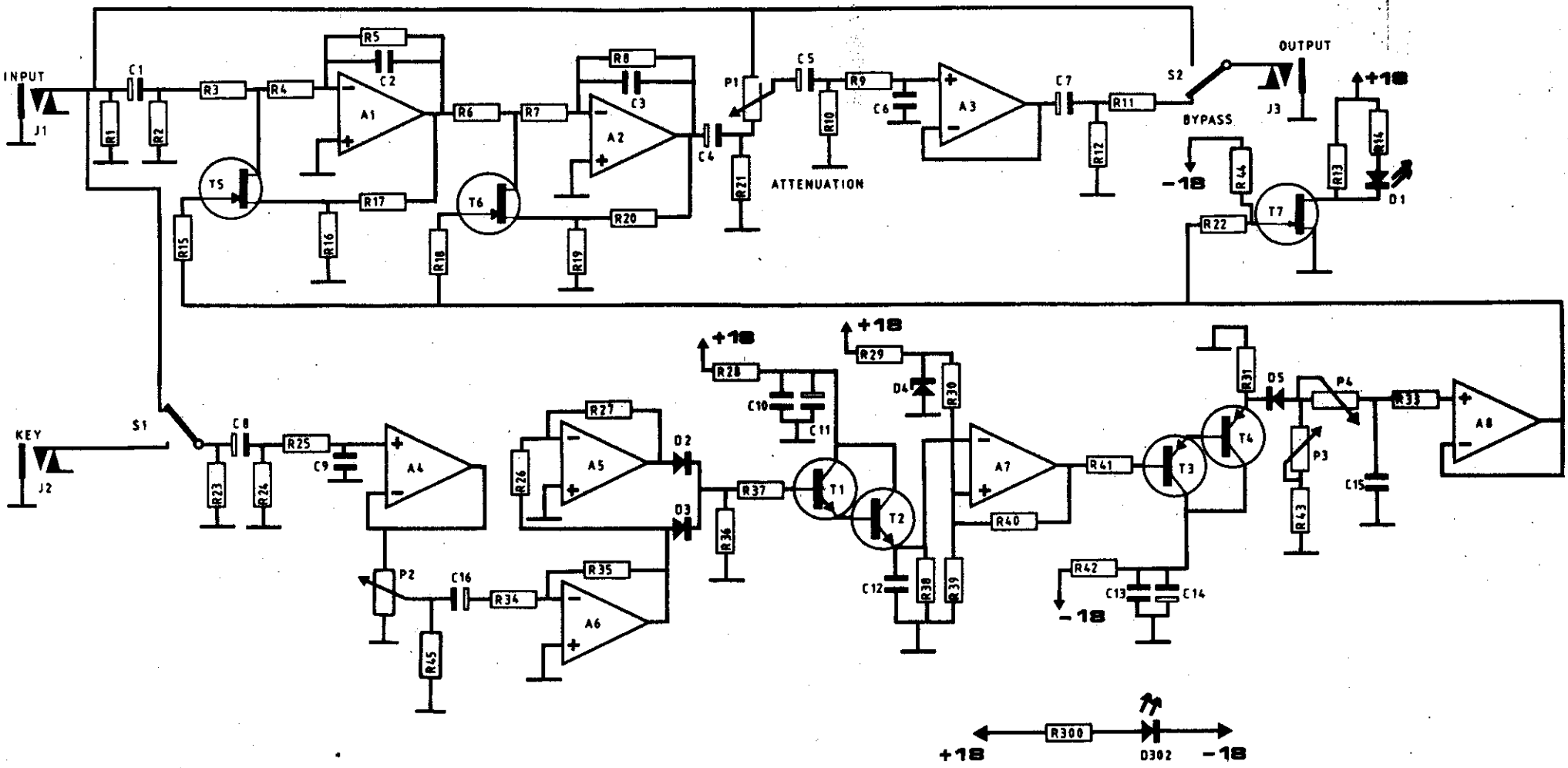
The product passed the specifications of the following regulations;

Low voltage 73 / 23 / EEG
EMC-regulations 89 / 336 / EEG.

(*) The product is tested in a normal users environment.

"NOISE GATE"

SERVICE MANUAL



6,7,8

R 300 + D302 ON P.C.B. NR.8

NOISE GATE 9.5"

ELECTRONICA B.V.

produktie en ontwikkeling van
geluidsmengpanelen en accessoires

Date: 28-10-1986 R & D department

PARTLIST : NOISE GATE 9.5''

print index: 8

PartNr	Value	Notes	ArtNr
R1	100 k	5%	0753
R2	100 k	5%	0753
R3	22 k	5%	0745
R4	2 k 2	5%	0733
R5	22 k	5%	0745
R6	22 k	5%	0745
R7	2 k 2	5%	0739
R8	22 k	5%	0745
R9	1 k	5%	0729
R10	100 k	5%	0753
R11	100 E	5%	0717
R12	47 k	5%	0749
R13	10 k	5%	0741
R14	1 k 8	5%	0732
R15	10 k	5%	0741
R16	100 E	5%	0717
R17	1 k 2	5%	0730
R18	10 k	5%	0741
R19	100 E	5%	0717
R20	1 k 2	5%	0730
R21	47 k	5%	0749
R22	10 k	5%	0741
R23	22 k	5%	0745
R24	22 k	5%	0745
R25	1 k	5%	0729
R26	10 k	5%	0741
R27	10 k	5%	0741
R28	-----		
R29	10 k	5%	0741
R30	12 k	5%	0742
R31	10 k	5%	0741
R32	----		
R33	1 k	5%	0729
R34	5 k 6	5%	0738
R35	560 k	5%	0762
R36	10 k	5%	0741
R37	100 E	5%	0720
R38	1 M	5%	0765
R39	6 k 8	5%	0739
R40	33 k	5%	0747
R41	100 E	5%	0720
R42	10 E	5%	0705
R43	1 k 0	5%	0729
R44	33 k	5%	0747
R45	1 k 5	5%	0731
R300	3 k 3	5%	0735

C1	47/25	rad	0287
C2	6 p 8	ker	0211
C3	6 p 8	ker	0211
C4	47/25	rad	0287
C5	47/25	rad	0287
C6	820 p	ker	0235
C7	47/25	rad	0287
C8	47/25	rad	0287
C9	820 p	ker	0235
C10	-----		
C11	-----		
C12	0.022	poly	0256
C13	0.1	poly	0261
C14	47/25	rad	0287
C15	0.47	poly	0266
C16	47/25	rad	0287
C300	470/40	ax	0295
C301	470/40	ax	0295
C302	47/25	rad	0287
C303	47/25	rad	0287
C304	0.1/63	ker	0241
C305	0.1/63	ker	0241
D1	LED	5x2mm red	0390
D2	1N4148	sgn	0342
D3	1N4148	sgn	0342
D4	8 V 2	zener	0352
D5	1N4148	sgn	0342
D300	1N4148	sgn	0342
D301	1N4148	sgn	0342
D302	LED	5x2mm red	0390
T1	BC 546	NPN	0328
T2	BC 546	NPN	0328
T3	BC 416/560	PNP	0327
T4	BC 416/560	PNP	0327
T5	2N5638	FET swch	0338
T6	2N5638	FET swch	0338
T7	2N5638	FET swch	0338
A1-4	TL 074	biFET opamp	0305
A5-8	TL 074	biFET opamp	0305
IC300	7818	pos.reg.	0322
IC301	7918	pos.reg.	0323
P1	10 k B	pot 12.5mm	0884
P2	47 k B	pot 12.5mm	0887
P3	4 M 7 A	pot 12.5mm	0894
P4	100 k A	pot 12.5mm	0888
S1	2 x 2 switch	FOX	0400
S2	2 x 2 switch	FOX	0400
S300	115/230 V	print switch	0083
J1	Cliff br.pl.	jack	0432
J2	Cliff br.pl.	jack	0432
J3	Cliff br.pl.	jack	0432
B300	B80C1000	bridge rect.	0345
TR300	trafo 2x18V	print	0582
F300	63 mA slow	fuse + holder	0693+0675