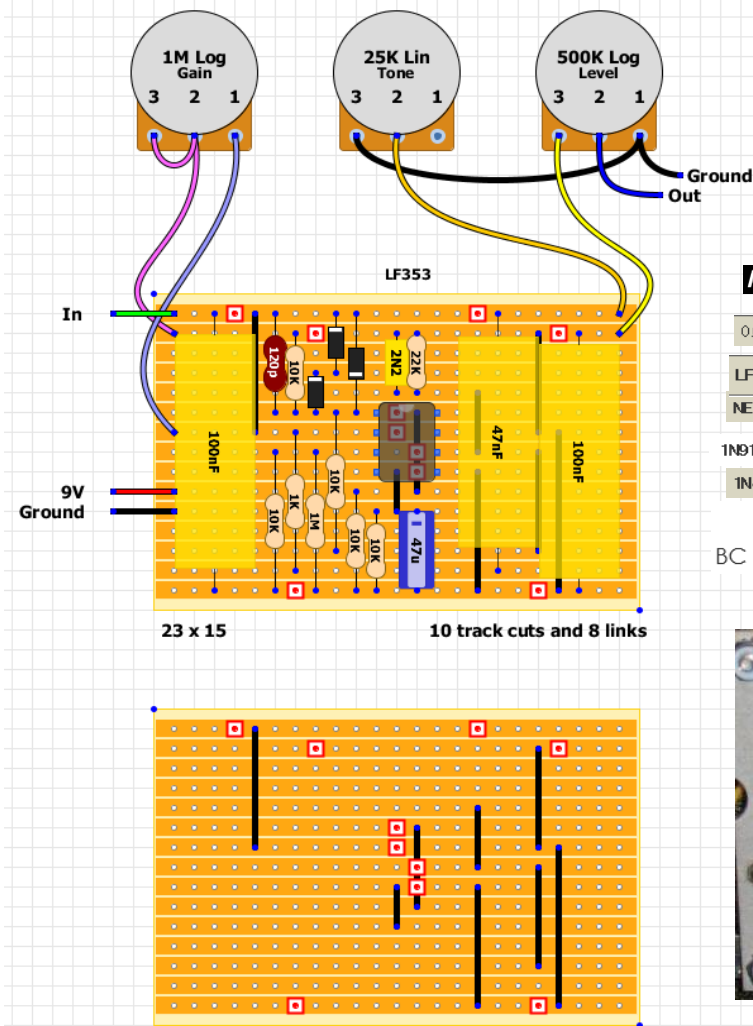


Clark Gainster



Tags: Overdrive, Verified, Vero

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IvIark © <http://tagboardeffects.blogspot.com>

Vishay/Roederstein

0.1µF/630VDC	φ9×18	MKT1813104630	¥320
0.047µF/400VDC	φ7×14	MKT1813473	¥150

Silver Mica

115pF	500VDC	SM115SAN (Sangamo)	¥100
120pF	500VDC	SM120	¥60

Mallory

0.0022µF	630VDC	φ4.5×10.5	150S222	¥130
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LF353N	8P DIP/Dual	National Semi. FET入力の定番品。中域のキャラクターが強いので、エフェクターにお勧め！	¥90
NE5532P	8P DIP/Dual	Texas Instruments 超定番品。プロ用スタンダード！	¥120

1N914AVY	シリコン	DO-35	VISHAY 高速スイッチングダイオード100PRV @0.3A	¥25
1N4148	シリコン	DO-35	高速ダイオード 100PRV @0.15A	¥20

Philips/BC Components

47µF/25VDC φ6×10mm 030(MEXICO)	C3173	¥80 数割
47µF/40VDC φ8×19mm 016	C3163	¥100 数割

CTS Potentiometers



24mm/シングル
カーボン型
シャフト径:1/4インチ ソリッドプラスシャフト
シャフト長:17.5mm (ねじ部:8mm)
プッシング(ねじ部)径:3/8インチ(9.5mm)

25kB	PCLD25kB	¥600 数割
500kA	PCLD500kA	¥600 数割
1MA	PCLD1MA	¥600 数割

抵抗 1/2W

1k	1
10k	5
22k	1
1M	2



dual opamps should work fine. Try on JRC4558, TL072, NE5532
630V tubular caps for 100n and 47n, plus silver mica for 120p and a panasonic for 2n2. Axial philips for 47µ of course :)
For opamp i used LF353 as the layout suggests. 1N4148 for diodes, as i didn't want to compromise the output level by going mojo with OA91s :)

■ NJM072B/082B 電気的特性 (V₊/V₋=±15V, T_a=25°C)

項目	記号	条件	最小	標準	最大	単位
入力オフセット電圧	V _{IO}	R _S =50Ω	-	3(5)	10(15)	mV
入力オフセット電流	I _{IO}		-	5	50(200)	pA
入力バイアス電流	I _B		-	30	200(400)	pA
入力抵抗	R _{IN}		-	10 ¹²	-	Ω
電圧利得	A _V	R _L =2kΩ, V _O =±10V	88	106	-	dB
最大出力電圧振幅	V _{OPP}	R _L =10kΩ	24	27	-	V _{P-P}
同相入力電圧範囲	V _{IDM}		±10	-	-	V
同相信号除去比	CMR	R _S ≤10kΩ	70	76	-	dB
電源電圧除去比	SVR	R _S ≤10kΩ	70	76	-	dB
消費電流	I _{CC}		-	3	5(5.6)	mA
スルーレート	SR		-	13	-	V/μs
ユニティゲイン周波数	f _T		-	3	-	MHz
入力換算雑音電圧	V _{NI}	R _S =100Ω, BW=10~10kHz	-	4	-	μV _{rms}

■ NJM072/082 電気的特性 (V₊/V₋=±15V, T_a=25°C)

項目	記号	条件	最小	標準	最大	単位
入力オフセット電圧	V _{IO}	R _S =50Ω	-	3(5)	10(15)	mV
入力オフセット電流	I _{IO}		-	5	50(200)	pA
入力バイアス電流	I _B		-	30	200(400)	pA
入力抵抗	R _{IN}		-	10 ¹²	-	Ω
電圧利得	A _V	R _L =2kΩ, V _O =±10V	88	106	-	dB
最大出力電圧振幅	V _{OPP}	R _L =10kΩ	24	27	-	V _{P-P}
同相入力電圧範囲	V _{IDM}		±10	-	-	V
同相信号除去比	CMR	R _S ≤10kΩ	70	76	-	dB
電源電圧除去比	SVR	R _S ≤10kΩ	70	76	-	dB
消費電流	I _{CC}		-	3	5(5.6)	mA
スルーレート	SR		-	20	-	V/μs
ユニティゲイン周波数	f _T		-	5	-	MHz
入力換算雑音電圧	V _{NI}	R _L =100Ω, BW=10~10kHz	-	4	-	μV _{rms}

OPA134, OPA2134, OPA4134

www.ti.com

SBOS058A –DECEMBER 1997–REVISED OCTOBER 2015

6.4 Electrical Characteristics

At T_A = +25°C, V_S = ±15 V, unless otherwise noted

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
AUDIO PERFORMANCE					
Total Harmonic Distortion + Noise	G = 1, f = 1 kHz, V _O = 3 Vrms R _L = 2 kΩ R _L = 600 Ω		0.00008%		
Intermodulation Distortion	G = 1, f = 1 kHz, V _O = 1 Vp-p		-98		dB
Headroom ⁽¹⁾	THD < 0.01%, R _L = 2 kΩ, V _S = 18 V		23.6		dBu
FREQUENCY RESPONSE					
Gain-Bandwidth Product			8		MHz
Slew Rate ⁽²⁾		±15	±20		V/μs
Full Power Bandwidth			1.3		MHz
Settling Time 0.1%	G = 1, 10-V Step, C _L = 100 pF		0.7		μs
Settling Time 0.01%	G = 1, 10-V Step, C _L = 100 pF		1		μs
Overload Recovery Time	(V _{IN}) × (Gain) = V _S		0.5		μs

Gainster...IC

...SlewRate...over13V/μs

■ ELECTRICAL CHARACTERISTICS NJM4558/4559

(V₊/V₋=±15V, T_a=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Input Offset Voltage	V _{IO}	R _S ≤10kΩ	-	0.5	6	mV
Input Offset Current	I _{IO}		-	5	200	nA
Input Bias Current	I _B		-	25	500	nA
Input Resistance	R _{IN}		0.3	5	-	MΩ
Large Signal Voltage Gain	A _V	R _L ≥2kΩ, V _O =±10V	86	100	-	dB
Maximum Output Voltage Swing 1	V _{OM1}	R _L ≥10kΩ	±12	±14	-	V
Maximum Output Voltage Swing 2	V _{OM2}	R _L ≥2kΩ	±10	±13	-	V
Input Common Mode Voltage Range	V _{ICM}		±12	14	-	V
Common Mode Rejection Ratio	CMR	R _S ≤10kΩ	70	90	-	dB
Supply Voltage Rejection Ratio	SVR	R _S ≤10kΩ	76.5	90	-	dB
Operating Current	I _{CC}		-	3.5	5.7	mA
Slew Rate			-	1	-	V/μs
	NJM4558	SR	-	1	-	V/μs
	NJM4559	SR	-	2	-	V/μs
Equivalent Input Noise Voltage (note2)	V _{NI}	RIAA, R _S =2.2kΩ, 30kHz LPF	-	1.4	-	μVrms
Gain Bandwidth Product	GB			3		MHz
	NJM4558			3		MHz
	NJM4559			6		MHz

LF353

AC 電気的特性 (Note 5) 広帯域 JFET 入力デュアル・オペアンプ

Symbol	Parameter	Conditions	LF353			Units
			Min	Typ	Max	
	Amplifier to Amplifier Coupling	T _A =25°C, f=1 Hz–20 kHz (Input Referred)		-120		dB
SR	Slew Rate	V _S =±15V, T _A =25°C	8.0	13		V/μs
GBW	Gain Bandwidth Product	V _S =±15V, T _A =25°C	2.7	4		MHz
e _n	Equivalent Input Noise Voltage	T _A =25°C, R _S =100Ω, f=1000 Hz		16		nV/√Hz
i _n	Equivalent Input Noise Current	T _A =25°C, f=1000 Hz		0.01		pA/√Hz

7.6 Operating Characteristics

NE5532, NE5532A, SA5532, SA5532A

V_{CC±} = ±15 V, T_A = 25°C (unless otherwise noted)

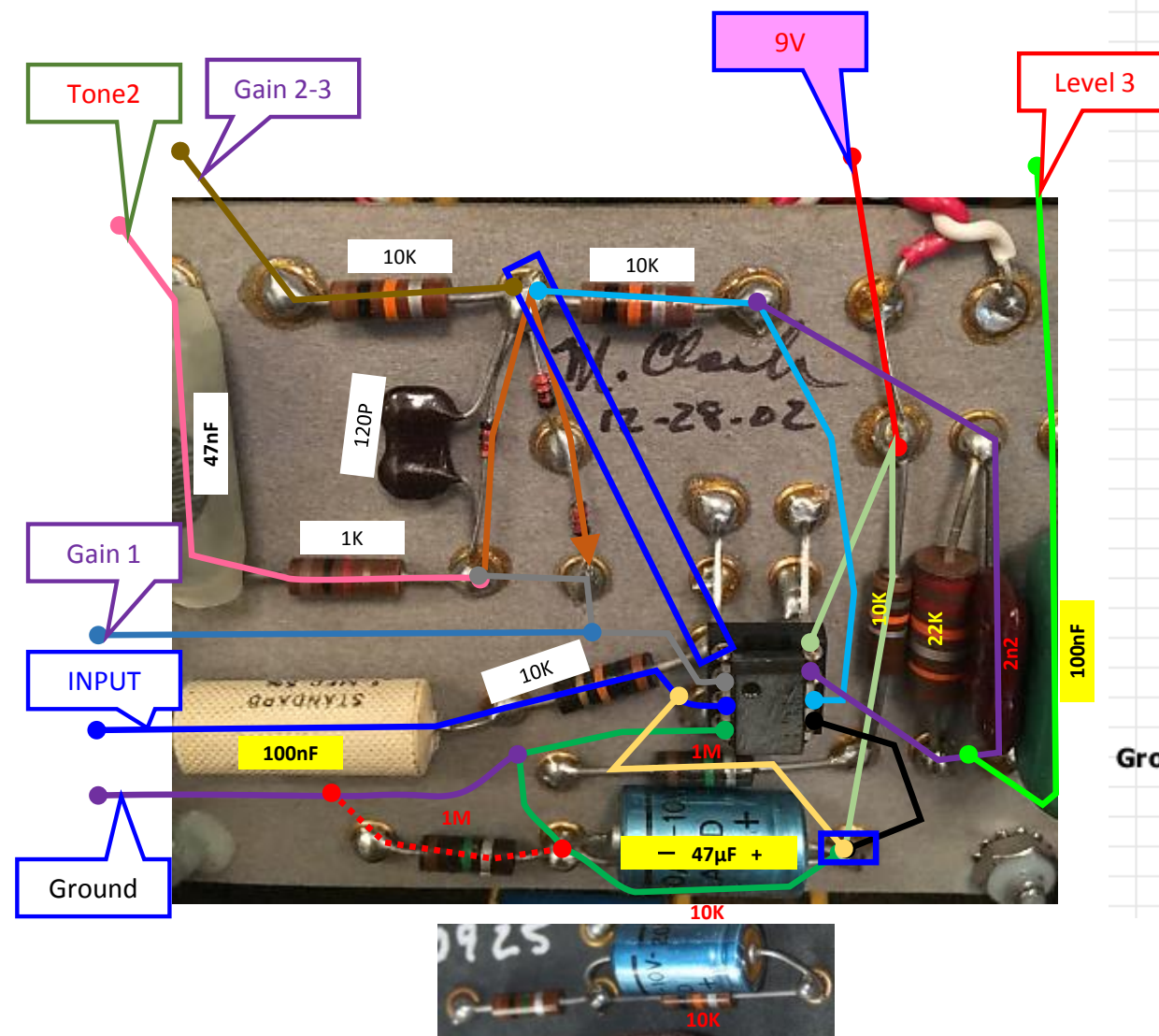
PARAMETER	TEST CONDITIONS	NE5532, SA5532			NE5532A, SA5532A			UNIT
		MIN	TYP	MAX	MIN	TYP	MAX	
SR Slew rate at unity gain			9			9		V/μs
Overshoot factor	V _I = 100 mV, R _L = 600 Ω, A _{VD} = 1, C _L = 100 pF		10			10		%
V _n Equivalent input noise voltage	f = 30 Hz f = 1 kHz		8 5			8 5	10 6	nV/√Hz
I _n Equivalent input noise current	f = 30 Hz f = 1 kHz		2.7 0.7			2.7 0.7		pA/√Hz

Dual Bipolar/JFET, Audio Operational Amplifier

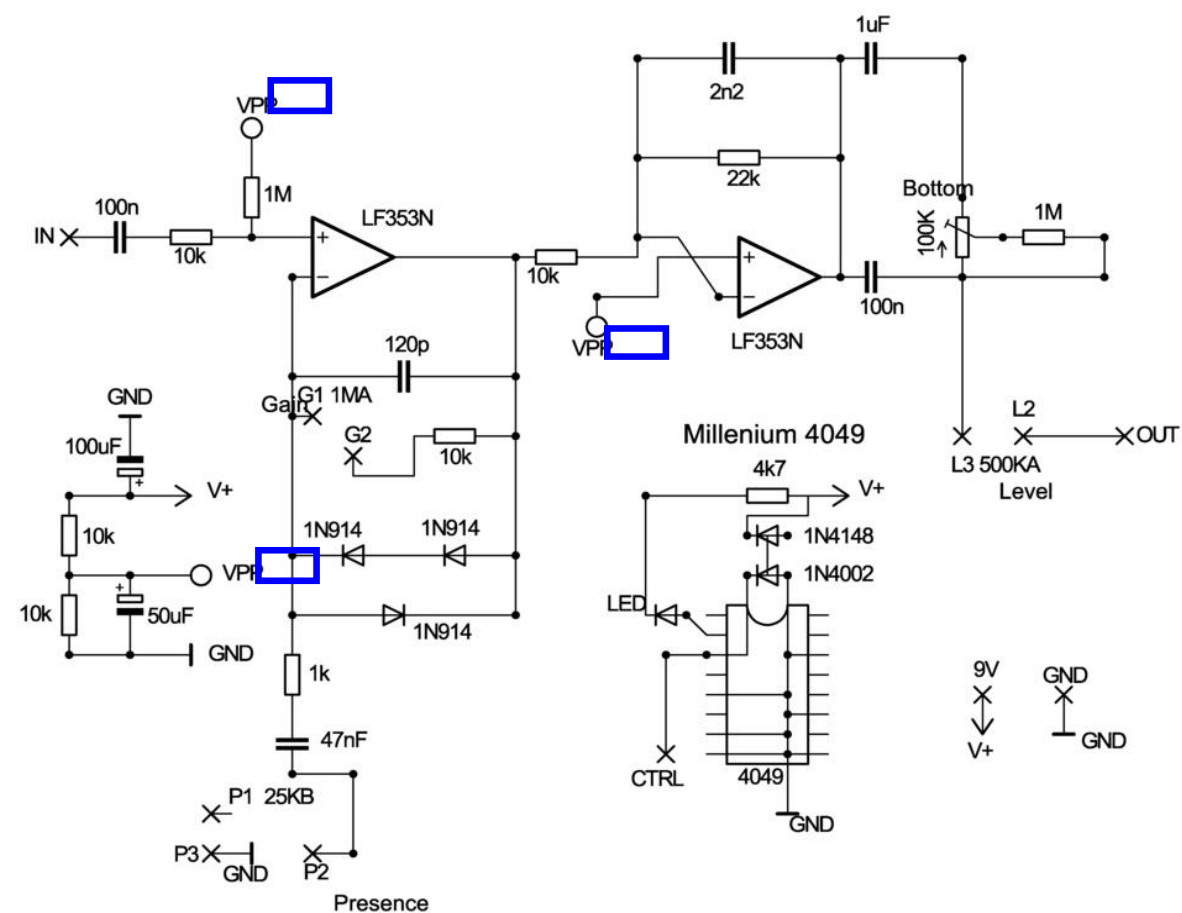
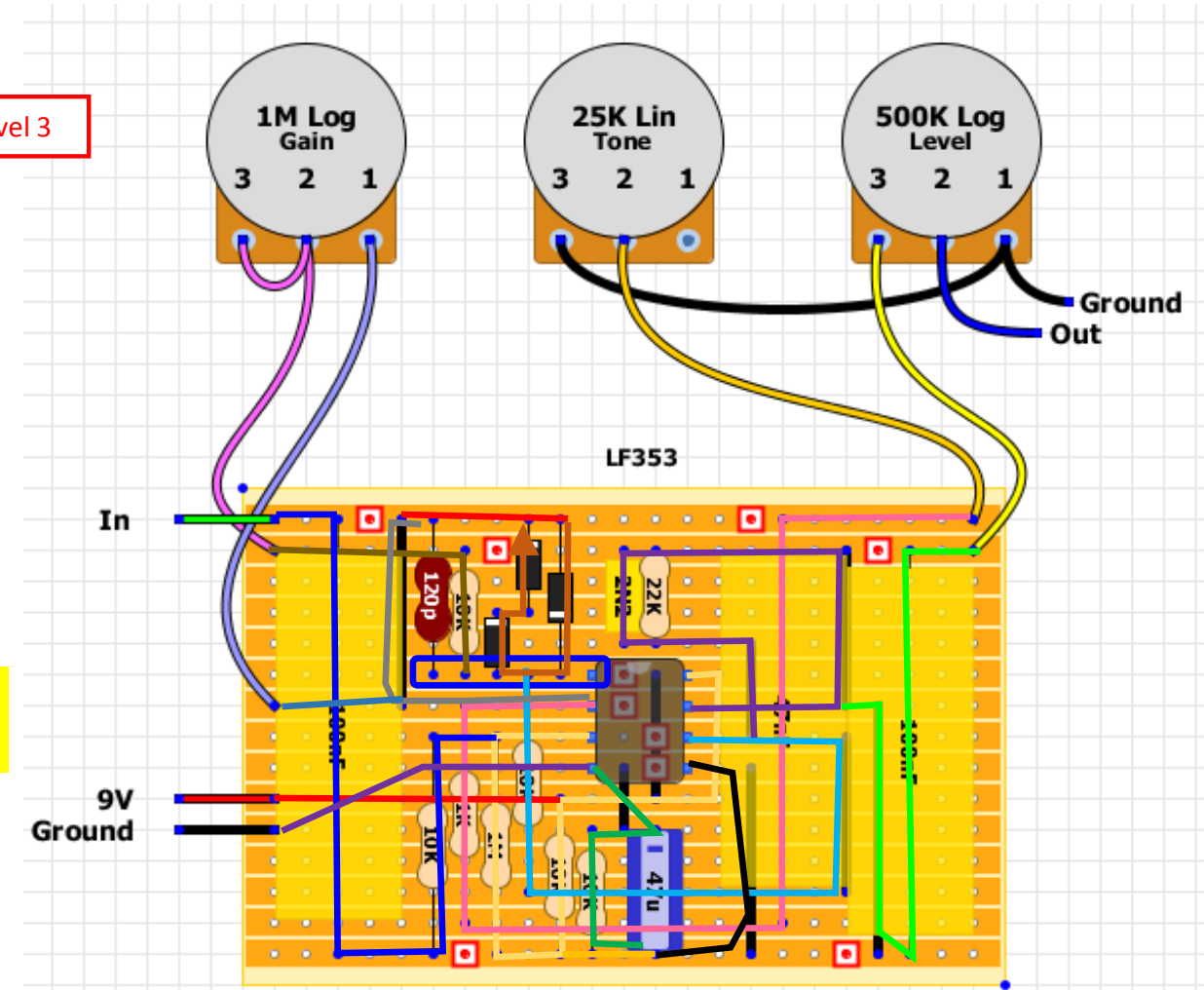
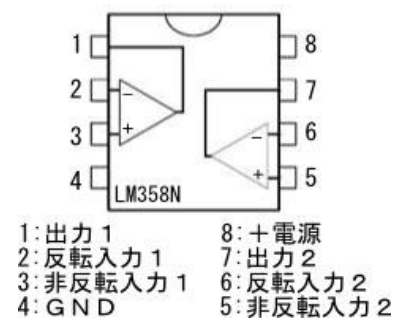
OP275*

DYNAMIC PERFORMANCE		R _L = 2 kΩ	15	22	V/μs kHz MHz Degrees
Slew Rate	SR				
Full-Power Bandwidth	BW _p				
Gain Bandwidth Product	GBP				
Phase Margin	φ _m				
Overshoot Factor		V _{IN} = 100 mV, A _V = +1, R _L = 600 Ω, C _L = 100 pF		10	%

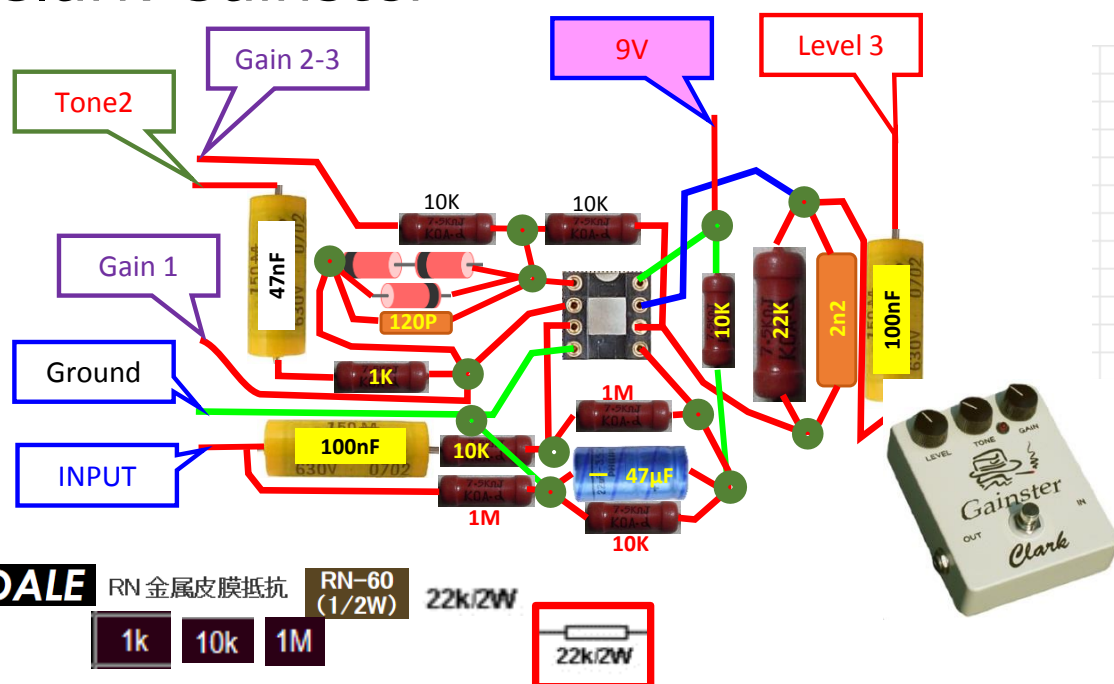
Clark Gainster



dual opamps should work fine. Try on JRC4558, TL072, NE5532
630V tubular caps for 100n and 47n, plus silver mica for 120p and a
panasonic for 2n2. Axial philips for 47μ of course :)
For opamp i used LF353 as the layout suggests. 1N4148 for diodes, as i
didn't want to compromise the output level by going mojo with
OA91s :)



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DALE RN 金属皮膜抵抗
1k 10k 1M
RN-60 (1/2W) 22k/2W

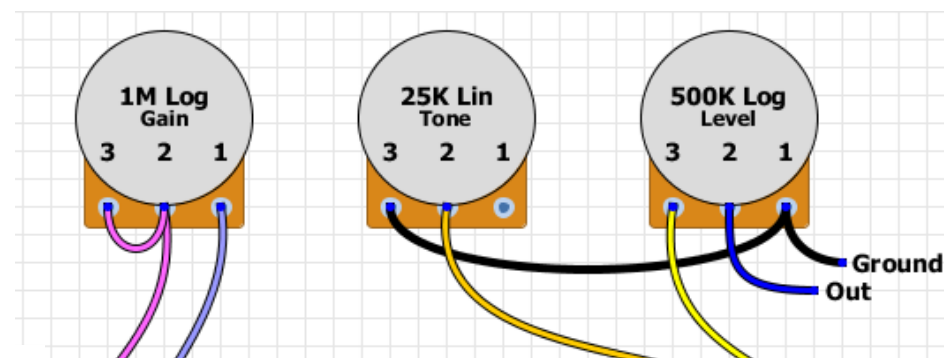
Mallory

0.047uF	630VDC	φ7×19		¥165
0.1uF	630VDC	φ7.5×27		¥210

Philips/BC Components
47uF/25VDC
φ6×10mm
080(MEXICO) ¥80 数割

Silver Micaコンデンサー(ディップ型) 120pF 500VDC SM120 ¥60

LF353N	8P DIP/Dual	National Semi FET入力の定番品。 中域のキャラクターが強いので、エフェクターにお勧め！	¥90
NE5532P	8P DIP/Dual	Texas Instruments 超定番品。プロ用スタンダード！	¥120
OP275	8P DIP/Dual	Analog Devices JFET入力 ハイパフォーマンスオーディオ！	¥350
OPA2604AP	8P DIP/Dual	Burr-Brown/TI 近頃話題の多いハイファイIC FET入力の決定番！	¥630



Sprague /SBE
0.0022uF/100VDC
約16×7×5mm
225P ポリエステル
FILM/FOIL
オレンジドロップ

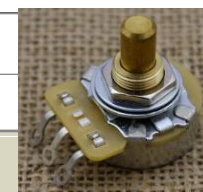


C7084

¥80
数割

CTS Potentiometers

25kΩ	PCLD25KB	¥600 数割
500kΩ	PCLD500KA	¥600 数割
1MΩ	PCLD1MA	¥600 数割



The diagram illustrates three wiring configurations for the 3-pin connector, each represented by a circular module with three pins labeled 3, 2, and 1 from left to right.

- 1M Log Gain:** The module is connected to a pink wire (pin 3) and a blue wire (pin 1).
- 25K Lin Tone:** The module is connected to a black wire (pin 3), a yellow wire (pin 2), and a blue wire (pin 1). The blue wire is labeled "Ground Out".
- 500K Log Level:** The module is connected to a yellow wire (pin 3), a blue wire (pin 2), and a black wire (pin 1). The black wire is labeled "Ground Out".



Gainster ··· IC ··· SlewRate ··· over13V/μs



Actual size(実寸大)