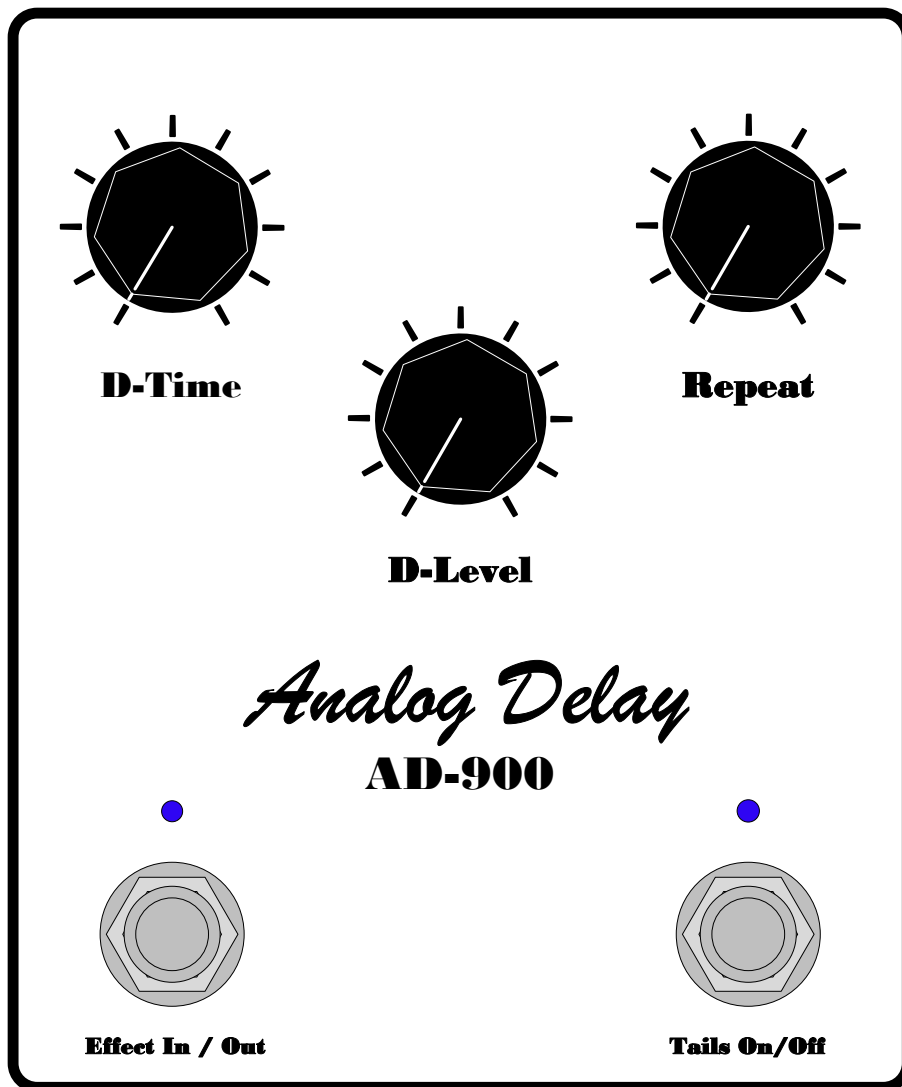
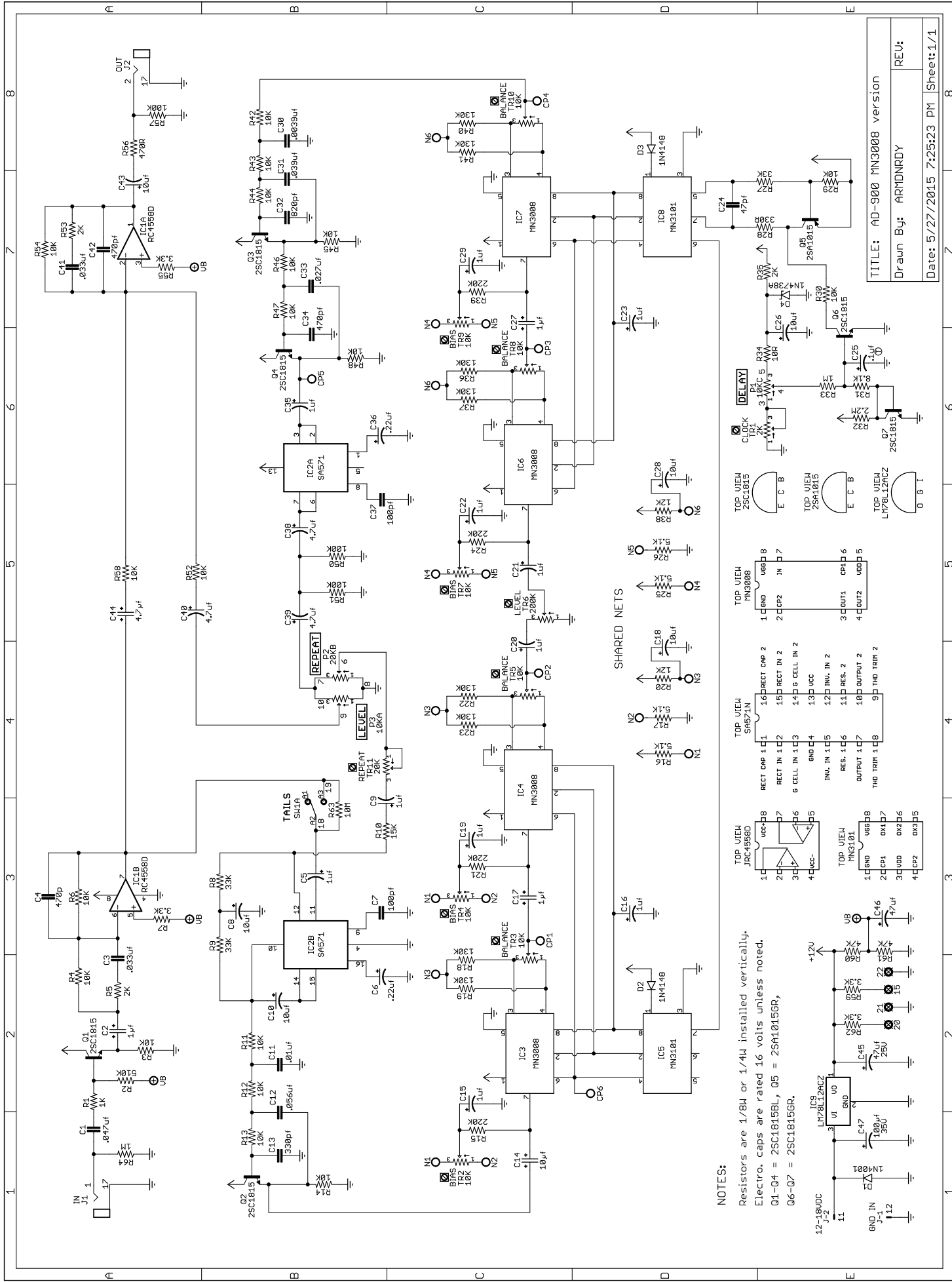


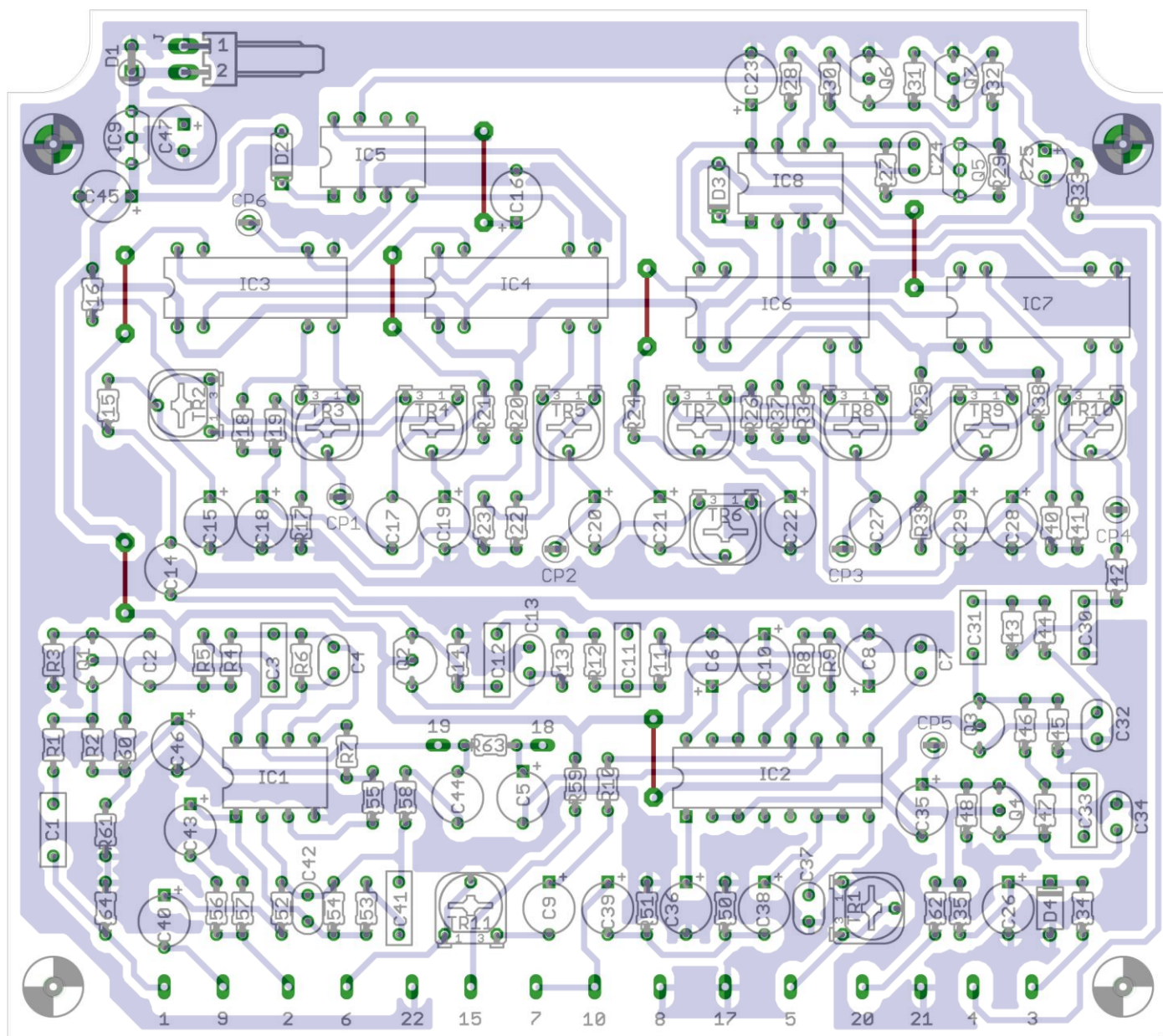
AD-900 MN3008 Version

Build Document





AD-900 MN3008 Version Overlay



AD-900 MN3008 BOM QUANTITY

Qty	Value	Device	Parts
1	47pf		C24
2	100pf		C7, C37
1	330pf		C13
3	470pf		C4, C34, C42
1	820pf		C32
1	.0039uf	film	C30
1	.01uf	"	C11
1	.027uf	"	C33
2	.033uf	"	C3, C41
1	.039uf	"	C31
1	.047uf	"	C1
1	.056uf	"	C12
1	.1uf	tant	C25
2	.22uf	elect	C6, C36
11	1uf	elect	C5, C9, C15, C16, C19, C20, C21, C22, C23, C28, C35
3	1µf NP	elect	C2, C17, C27
3	4.7uf	elect	C38, C39, C40
1	4.7µf NP	elect	C44
1	10µf NP	elect	C14
6	10uf	elect	C8, C10, C18, C26, C29, C43
2	47uf	elect	C45, C46
1	100µf	elect	C47
1	10R		R34
1	330R		R28
1	470R		R56
1	1K		R1
3	2K		R5, R35, R53
3	3.3K		R7, R55, R59
4	5.1K		R16, R17, R25, R26
1	8.1K		R31
19	10K		R3, R4, R6, R11, R12, R13, R14, R29, R30, R42, R43, R44, R45, R46, R47, R48, R52,
	(10K continued)		R54, R58
2	12K		R20, R38
1	15K		R10
3	33K		R8, R9, R27
2	47K		R60, R61
3	100K		R50, R51, R57
8	130K		R18, R19, R22, R23, R36, R37, R40, R41
4	220K		R15, R21, R24, R39
1	510K		R2
2	1M		R33, R64
1	2.2M		R32
1	10M		R63
1	2K	TRIMPOT	TR1
8	10K	TRIMPOT	TR2, TR3, TR4, TR5, TR7, TR8, TR9, TR10
1	20K	TRIMPOT	TR11
1	200K	TRIMPOT	TR6
1	10KA	POT	P3
1	10KC	POT	P1
1	20KB	POT	P2

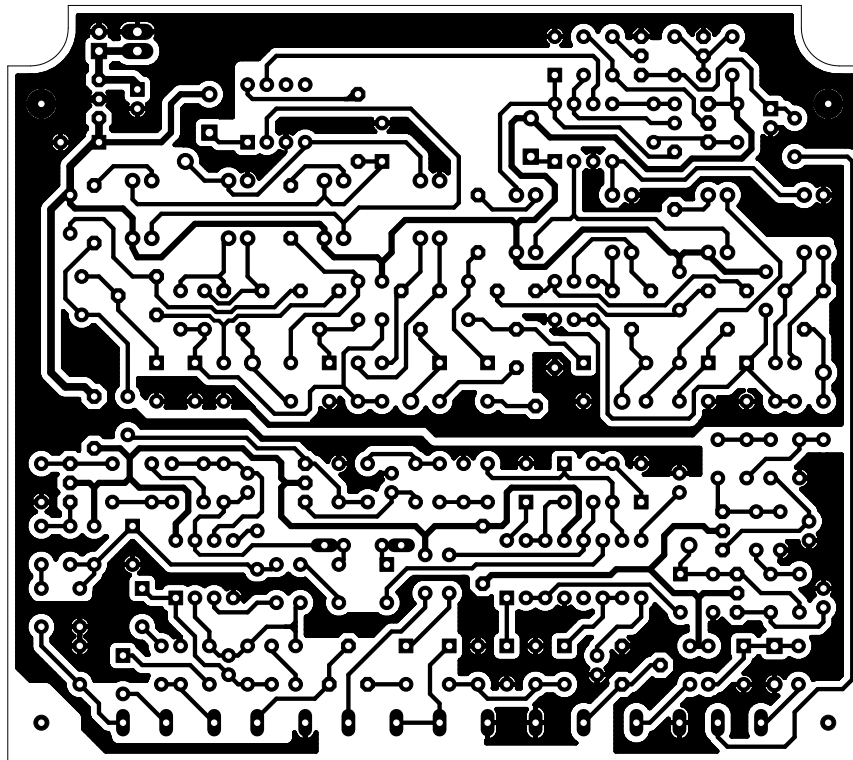
AD-900 MN3008 BOM QUANTITY

1	2SA1015GR	Q5
2	2SC1815GR	Q6, Q7
4	2SC1815BL	Q1, Q2, Q3, Q4
1	1N4001	D1
2	1N4148	D2, D3
1	1N4738A 8.2V zener	D4
1	LM78L12ACZ	IC9
4	MN3008	IC3, IC4, IC6, IC7
1	MN3101	IC5, IC8
1	RC4558D	IC1
1	SA571N	IC2
5	CHECK POINTS	CP1, CP2, CP3, CP4, CP6
2	¼" JACKS	Enclosed
1	DC JACK	
2	3PDT FOOT SWITCH	
1	ENCLOSURE 1590XX	
2	3MM LED BLUE	
3	KNOBS	

AD-900 MN3008 BOM designations

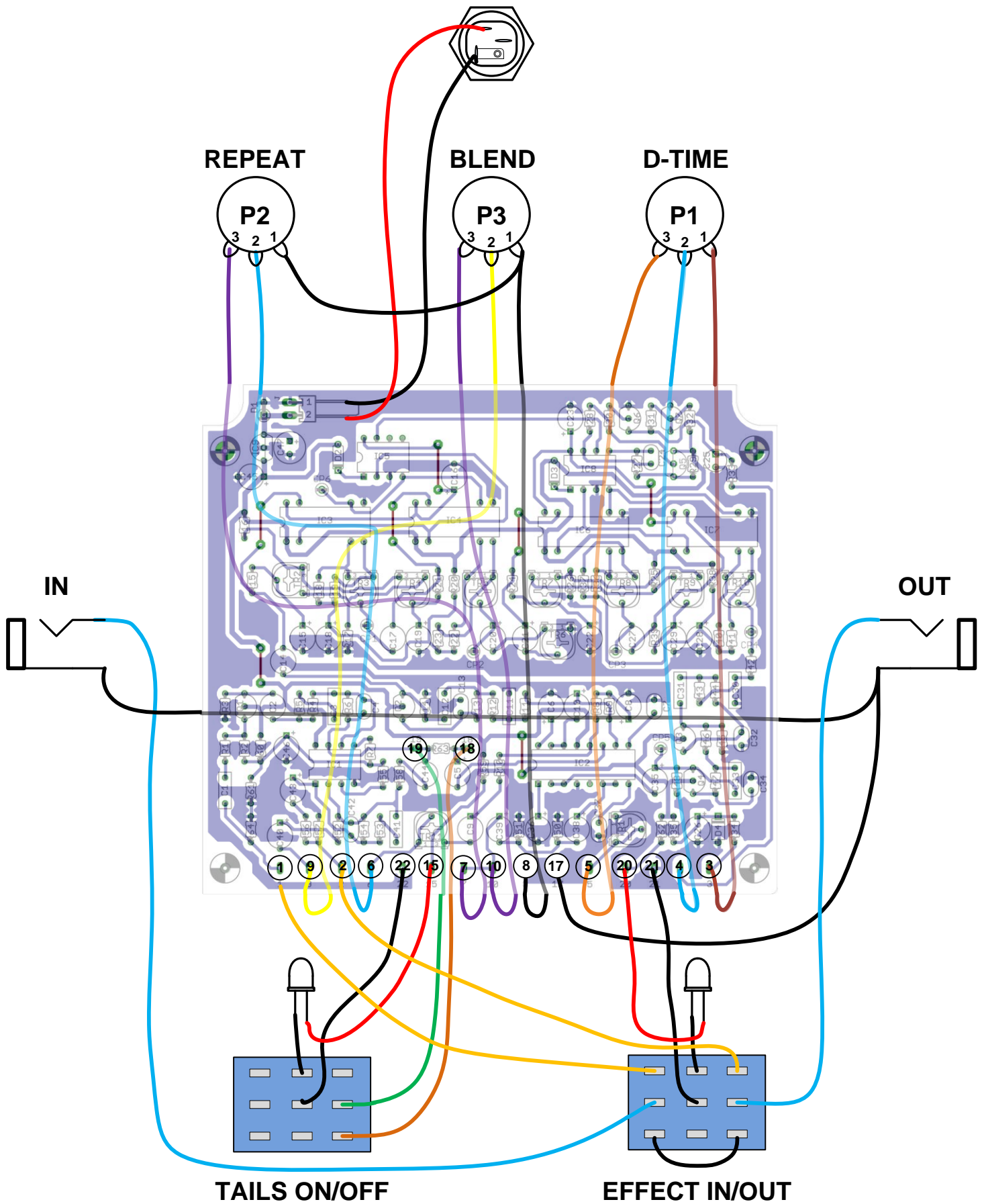
C1 .047uf film	R14 10K	TR11 20K (RM-065)
C2 1uf NP elect	R15 220K	
C3 .033uf film	R16 5.1K	P1 10KC
C4 470p ceramic	R17 5.1K	P2 20KB
C5 1uf elect	R18 130K	P3 10KA
C6 .22uf elect	R19 130K	
C7 100pf ceramic	R20 12K	D1 1N4001
C8 10uf elect	R21 220K	D2 1N4148
C9 1uf elect	R22 130K	D3 1N4148
C10 10uf elect	R23 130K	D4 1N4738A (8.2V zener)
C11 .01uf film	R24 220K	LED1 3MM
C12 .056uf film	R25 5.1K	LED2 3MM
C13 330pf ceramic	R26 5.1K	
C14 10uf NP elect	R27 33K	Q1 2SC1815BL
C15 1uf elect	R28 330R	Q2 2SC1815BL
C16 1uf elect	R29 10K	Q3 2SC1815BL
C17 1uf NP elect	R30 10K	Q4 2SC1815BL
C18 10uf elect	R31 8.1K (8.2K)	Q5 2SA1015GR
C19 1uf elect	R32 2.2M	Q6 2SC1815GR
C20 1uf elect	R33 1M	Q7 2SC1815GR
C21 1uf elect	R34 10R	
C22 1uf elect	R35 2K	IC1 RC4558D
C23 1uf elect	R36 130K	IC2 SA571
C24 47pf ceramic	R37 130K	IC3 MN3008
C25 .1uf tant	R38 12K	IC4 MN3008
C26 10uf elect	R39 220K	IC5 MN3101
C27 1uf NP elect	R40 130K	IC6 MN3008
C28 10uf elect	R41 130K	IC7 MN3008
C29 1uf elect	R42 10K	IC8 MN3101
C30 .0039uf film	R43 10K	IC9 LM78L12ACZ
C31 .039uf film	R44 10K	
C32 820pf ceramic	R45 10K	CP1 Keystone 5004 test point
C33 .027uf film	R46 10K	CP2 Keystone 5004 test point
C34 470pf ceramic	R47 10K	CP3 Keystone 5004 test point
C35 1uf elect	R48 10K	CP4 Keystone 5004 test point
C36 .22uf elect	R50 100K	CP5 Keystone 5004 test point
C37 100pf ceramic	R51 100K	CP6 Keystone 5004 test point
C38 4.7uf elect	R52 10K	
C39 4.7uf elect	R53 2K	J1 ¼" jack enclosed
C40 4.7uf elect	R54 10K	J2 ¼" jack enclosed
C41 .033uf film	R55 3.3K	J3 DC jack
C42 470pf ceramic	R56 470R	
C43 10uf elect	R57 100K	SW1 3P2T footswitch
C44 4.7uf NP elect	R58 10K	SW2 3P2T footswitch
C45 47uf elect	R59 3.3K	
C46 47uf elect	R60 47K	Enclosure 1590XX
C47 100uf elect	R61 47K	Knobs (3)
	R62 3.3K	
R1 1K	R63 10M	
R2 510K	R64 1M	
R3 10K		
R4 10K	TR1 2K (RM-065)	
R5 2K	TR2 10K (RM-065)	
R6 10K	TR3 10K (RM-065)	
R7 3.3K	TR4 10K (RM-065)	
R8 33K	TR5 10K (RM-065)	
R9 33K	TR6 200K (RM-065)	
R10 15K	TR7 10K (RM-065)	
R11 10K	TR8 10K (RM-065)	
R12 10K	TR9 10K (RM-065)	
R13 10K	TR10 10K (RM-065)	

AD-900 MN3008 Version PC Board



Set printer to "No Scaling" or 100%

AD-900 OFFBOARD WIRING



AD-900 Alignment Procedures (MN3008 version)

1. Setting before alignment

- 1) De-solder and remove one lead of R58 (10K) to cut the dry signal line.
- 2) Turn TR6 (level) trimmer CW. Set all other trimmers to 50%.

2. Power Supply

- 1) Connect DC power supply to AD-900 DC input jack.

3. Clock alignment

Setting: Insert shorted ¼" plug into Input jack and turn controls as follows.

D-Time CW, Repeat CCW, D-Level CW

- 1) Connect the probe of frequency counter to CP6. (clock line)
- 2) Turn TR1 to align clock to 7KHz \pm 200Hz.
- 3) Turn D-Time control CCW. Check if the frequency counter indicates 110 to 140KHz.

4. BBD Balance alignment

Setting: Insert shorted ¼" plug into Input jack and turn controls as follows.

D-Time CW, Repeat CCW, D-Level CW

- 1) Connect the probe of oscilloscope to CP1.
Set the oscilloscope to get the waveform as shown in fig. 1-a.
- 2) Turn TR3 to get the waveform as shown in fig. 1-b.
- 3) Connect the probe of oscilloscope to CP2.
- 4) Turn TR5 to get the waveform as shown in fig. 1-b.
- 5) Connect the probe of oscilloscope to CP3.
- 6) Turn TR8 to get the waveform as shown in fig. 1-b.
- 7) Connect the probe of oscilloscope to CP4.
- 8) Turn TR10 to get the waveform as shown in fig. 1-b.

AD-900 Alignment Procedures (MN3008 version)

4. BBD Bias alignment

Setting: Input 400Hz/0dBu sine wave (0dBu = .78V RMS) into AD-900 input with audio generator and turn controls as follows.

D-Time CCW, Repeat CCW, D-Level CW

- 1) Connect the probe of oscilloscope to CP1.
- 2) Turn TR2 and align sine wave to be symmetrical at top and bottom

Turn D-Time control CW, check if sine wave is symmetrical.

Fig.2-a & 2-b depict sine wave out of symmetry.

Fig. 2-c depicts sine wave symmetrical (D-Time CCW)

Fig. 2-d depicts sine wave symmetrical (D-Time CW)
- 3) Connect the probe of oscilloscope to CP2.
- 4) Turn TR4 and perform the same alignment as mentioned above.
- 5) Connect the probe of oscilloscope to CP3.
- 6) Turn TR7 and perform the same alignment as mentioned above.
- 7) Connect the probe of oscilloscope to CP4.
- 8) Turn TR9 and perform the same alignment as mentioned above.

AD-900 Alignment Procedures (MN3008 version)

6. Level alignment

Setting: Input 400Hz/-20dBu sine wave (-20dBu = .078V RMS) into AD-900 with audio generator and turn controls as follows.

D-Time CW, Repeat CCW, D-Level CW

- 1) Connect level meter to output jack.
- 2) Turn TR6 and align output level to -20dBu.
- 3) Alternate: Turn TR6 and align output level for .078V RMS.

7. Connection of dry signal line

Solder R58 (10K) which had been removed in 1. 1) and connect dry signal.

8. Sound check

- 1) Repeat alignment

Setting: D-Time CW, Repeat 3:00, D-Level CW

Input guitar signal and align TR11. Repeats should last 10 times before becoming inaudible on the 11th time. Check if self- oscillates when turning Repeat control fully CW.

- 2) Check the function of each control.

AD-900 Alignment Procedures (MN3008 version)

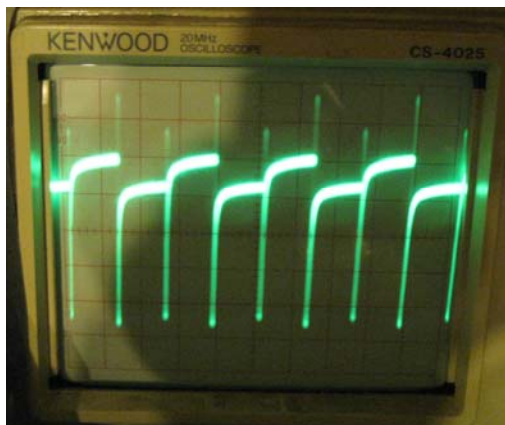


Fig. 1a

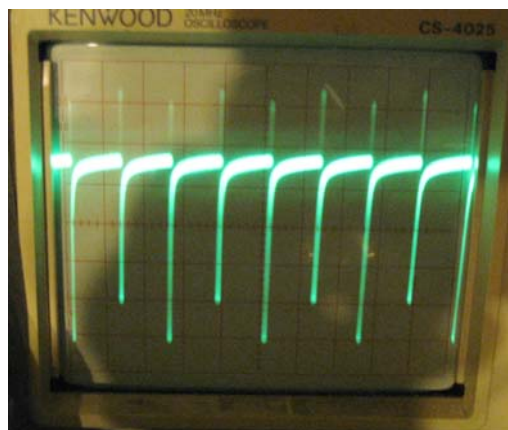


Fig. 1b

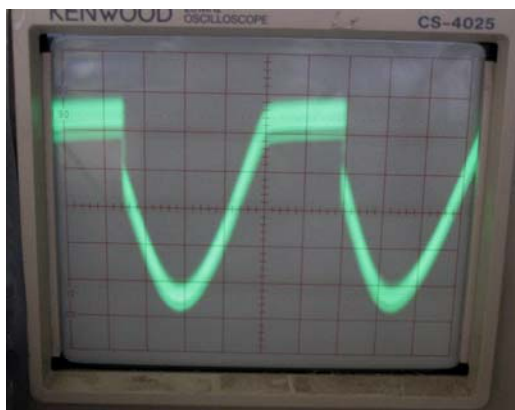


Fig. 2a

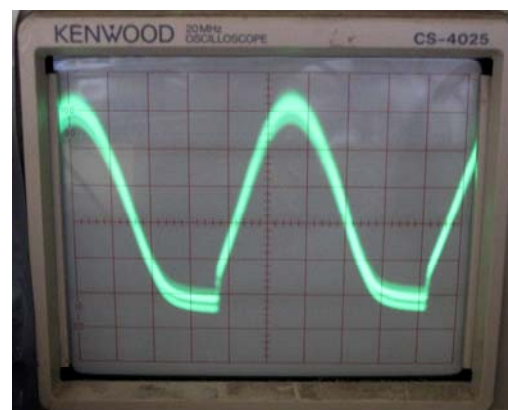


Fig. 2b

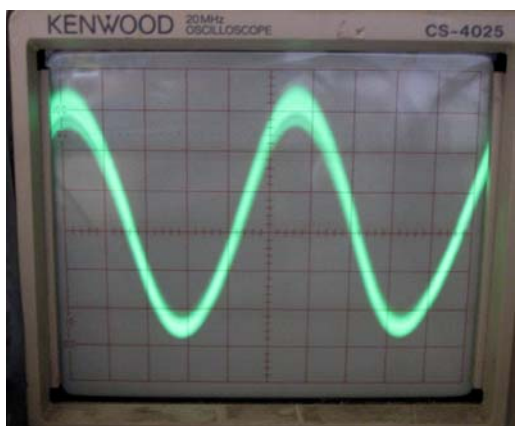


Fig. 2c

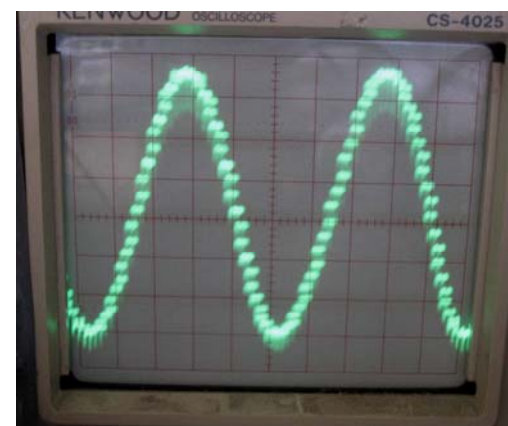
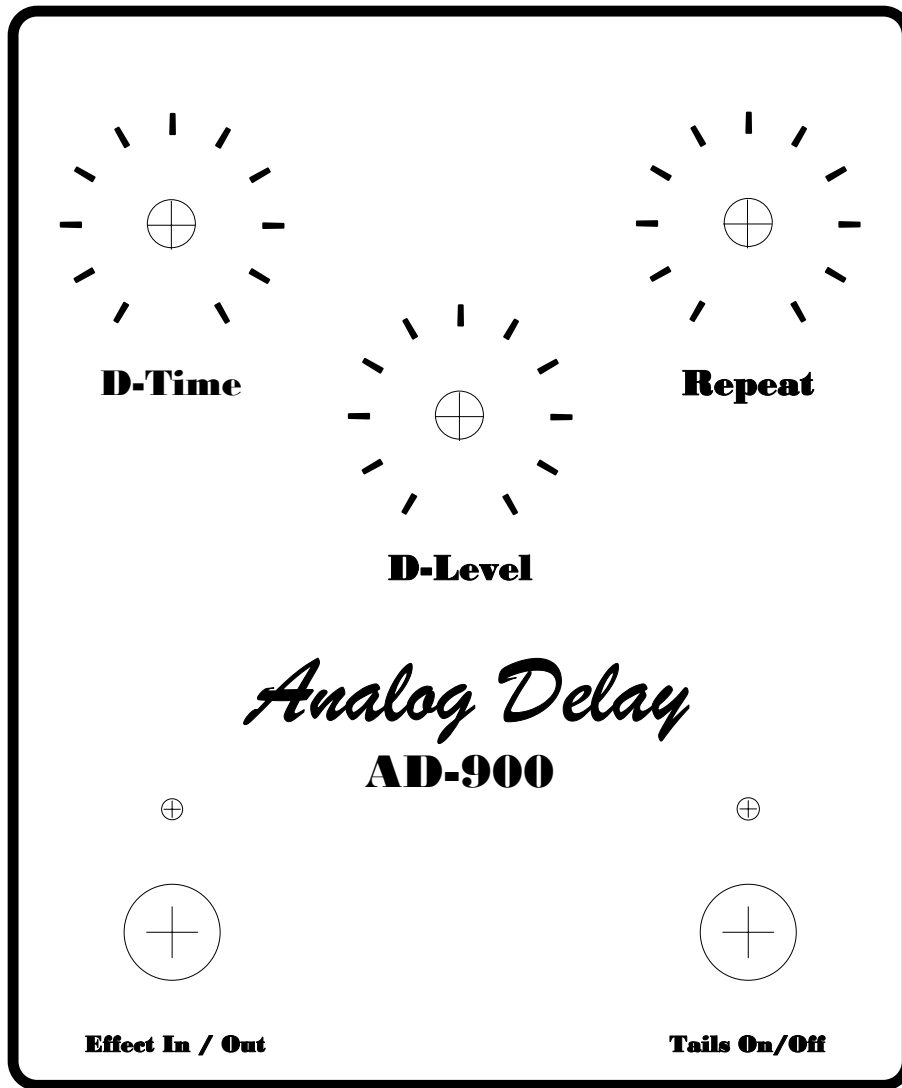
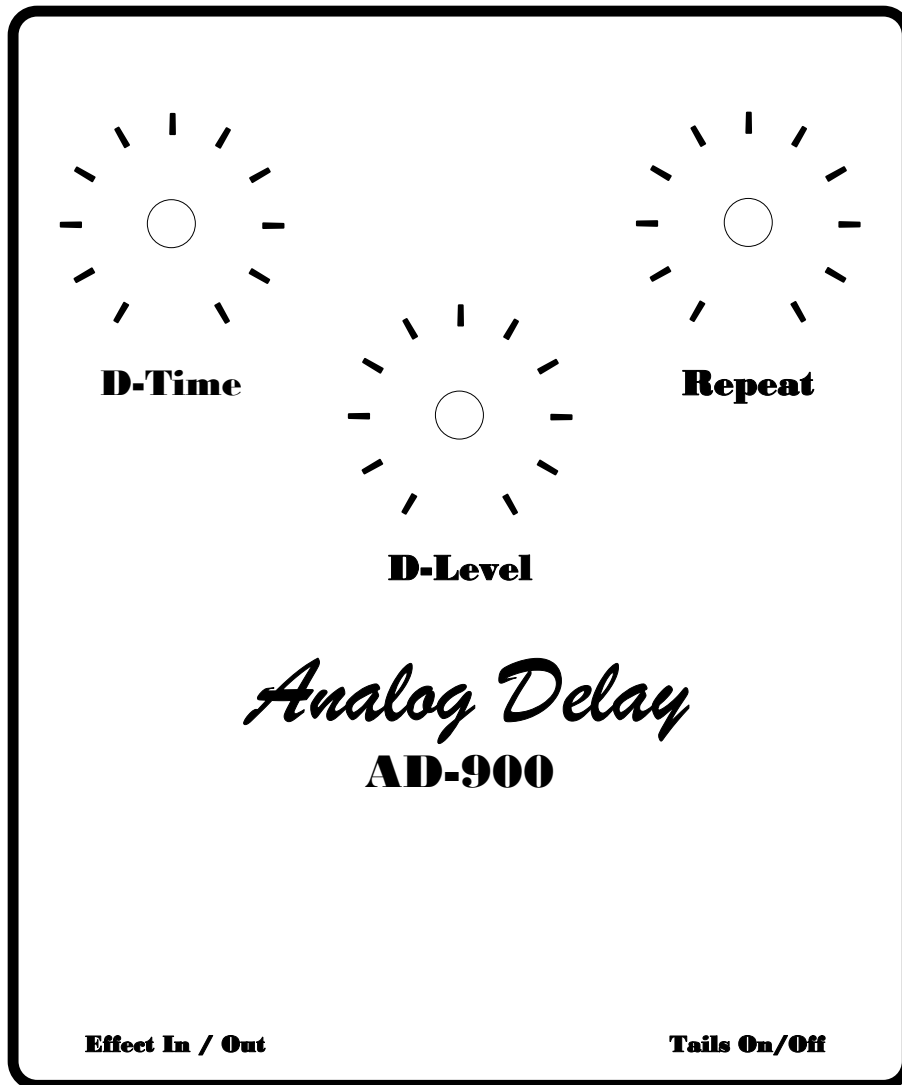


Fig. 2d

AD-900 MN3008 Version Drilling Template



AD-900 MN3008 Version Enclosure Artwork



Output Input

