

DR 812 MAIN BOARD V.1

VALUE	PCB	MOUSER	Qty	SIZE		NOTES
RESISTORS						
0R(JUMPER)	R141, R142		4	USE WIRE or LEG		
10R	R3, R6, R27, R28, R65, R66, R67, R68, R93, R94, R95, R96	271-10-RC	24	PITCH 10MM	1/4W MF 1%	
100R	R143, R144, R145, R146, R147, R148, R149, R150, R151, R152, R153, R154, R155, R156, R157, R158	271-100-RC	32	PITCH 10MM	1/4W MF 1%	
120R	R2, R5, R24, R26	271-120-RC	8	PITCH 10MM	1/4W MF 1%	
160R	R8, R12, R31, R32	271-160-RC	8	PITCH 10MM	1/4W MF 1%	
200R	R18, R20, R41, R42	271-200-RC	8	PITCH 10MM	1/4W MF 1%	
220R	R45, R46, R47, R49, R73, R74, R75, R77	271-220-RC	16	PITCH 10MM	1/4W MF 1%	
750R	R10, R11, R13, R14, R33, R34, R35, R36	271-750-RC	16	PITCH 10MM	1/4W MF 1%	
1K5	R69, R70, R97, R98	271-1.5K-RC	8	PITCH 10MM	1/4W MF 1%	
3K9	R57, R58, R85, R86	271-3.9K-RC	8	PITCH 10MM	1/4W MF 1%	
6K8	R1, R4, R7, R9, R23, R25, R29, R30	271-6.8K-RC	16	PITCH 10MM	1/4W MF 1%	
10K	R15, R16, R37, R38, R60, R62, R63, R64, R71, R72, R88, R89, R91, R92, R99, R100	271-10K-RC	32	PITCH 10MM	1/4W MF 1%	
20K	R21, R22, R43, R44	271-20K-RC	8	PITCH 10MM	1/4W MF 1%	
100K	R51, R52, R53, R54, R55, R56, R79, R80, R81, R82, R83, R84	271-100K-RC	24	PITCH 10MM	1/4W MF 1%	
120K	R48, R50, R76, R78	271-120K-RC	8	PITCH 10MM	1/4W MF 1%	
150K	R17, R19, R39, R40	271-150K-RC	8	PITCH 10MM	1/4W MF 1%	
220K	R45, R46, R47, R49, R73, R74, R75, R77	271-220K-RC	16	PITCH 10MM	1/4W MF 1%	
1M	R59, R61, R87, R90	271-1.0M-RC	8	PITCH 10MM	1/4W MF 1%	
DIODES						
1N4148	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32	512-1N4148	64			
CERAMIC CAPACITORS						
120pF	C19, C22, C43, C44	810-FG28C0G1H121JNT0	8	PITCH 5MM	50V	C0G/NPO
0.1uF	C17, C18, C20, C21, C39, C40, C41, C42, C47, C48, C49, C50, C53, C54, C55, C56	594-K104K15X7RF53K2	32	PITCH 2.5MM	50V	X7R
FILM CAPACITORS						
220pF	C9, C11, C31, C32	505-FKP2C002201D00KI	8	PITCH 5MM		FILM or STYRO
1000pF	C5, C6, C7, C8, C27, C28, C29, C30	505-FKP21000/100/10	16	PITCH 5MM		FILM or STYRO
ELECTROLYTIC CAPACITORS						
1uF	C45, C46, C51, C52	647-UVR2C010MED	8	D 5MM PITCH 2.5MM	35V	LOW ESSR
47uF/50 Volts	C3, C4, C25, C26	647-UVR1H470MED1TA	8	D 6MM PITCH 2.5MM	50V	LOW ESSR

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47uF	C1, C2, C23, C24	647-UVR1H470MED1TA	8	D 7MM PITCH 2.5MM	35V	LOW ESR
100uF	C13, C14, C15, C16, C35, C36, C37, C38	667-ECA-1VM101	16	D 7MM PITCH 2.5MM	35V	LOW ESR
220uF/50 Volts	C57, C58, C59, C60, C61 OPTIONAL	667-EEU-FS1H221LB	10	D 8MM PITCH 3.5MM	50V	LOW ESR
330uF	C10, C12, C33, C34	667-EEU-FS1V331LB	8	D 8MM PITCH 3.5MM	35V	LOW ESR
RELAYS						
G5V 12 VOLTS	K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15, K16	653-G5V-2-DC12	32		12V	
IC						
TL074	IC1, IC2, IC3, IC4	595-TL074CN	8	DIP14		
DIP14 SOCKETS	IC1, IC2, IC3, IC4	649-DILB14P-223TLF	8	DIP14		
DOA						
DOA 2520	AMP_1, AMP_2, AMP_3, AMP_4		8	2520	+/-16V	
DOA SOCKETS	AMP_1, AMP_2, AMP_3, AMP_4	855-H3161-01	48	D 2MM		
TRANSFORMERS						
INPUT TRANSFORMER	EA2622, SOWTER 9820, CINEMAG	CAPI GEAR	8			
OUTPUT TRANSFORMER	EA2503, SOWTER, CINEMAG	CAPI-GEAR	8			
MOLEX HEADER						
2 PIN 2.54	GAIN	538-22-29-2021	8	PITCH 2.54MM		
3 PIN 2.54	IN, OUT,	538-22-29-2031	16	PITCH 2.54MM		
4 PIN 2.54	INPUT_XFRM DONT USE WITH PCB MOUNT TRANSFORMER	538-22-29-2041	8	PITCH 2.54MM		
6 PIN 2.54	OUTPUT_LEVEL	538-22-29-2061	8	PITCH 2.54MM		
7 PIN 2.54	CTRL	538-22-29-2071	8	PITCH 2.54MM		
8 PIN 2.54	OUTPUT_XFRM	538-22-29-2081	8	PITCH 2.54MM		
MOLEX CRIMP HOUSING						
2 PIN 2.54	GAIN	538-22-01-2027	8	PITCH 2.54MM		
3 PIN 2.54	IN, OUT,	538-22-01-2037	16	PITCH 2.54MM		
4 PIN 2.54	INPUT_XFRM DONT USE WITH PCB MOUNT TRANSFORMER	538-22-01-2047	8	PITCH 2.54MM		
6 PIN 2.54	OUTPUT_LEVEL	538-22-01-2067	8	PITCH 2.54MM		
7 PIN 2.54	CTRL	538-22-01-2077	8	PITCH 2.54MM		
8 PIN 2.54	OUTPUT_XFRM	538-22-01-2087	8	PITCH 2.54MM		
Solder Terminals 2.54		538-08-52-0123	264			
TERMINAL BLOCKS						
2 PIN 5.08	GND, PSU	651-1985920	4	PITCH 5.08		

FRONT PANEL

	VALUE	PCB	Qty	MOUSER	SIZE		NOTES
LEDS							
3	2 COLOUR LED	LED1, LED2, LED3, LED4	8	696-SSL-LX3044IGW	DIAM 3MM	2 PINS	RED/GREEN
TOGGLE SWITCHES							
4	SPDT TOGGLE	S1, S2, S3, S4	32	108-1MS1T1B1M2QE-EVX			
KNOBS							
		INPUT GAIN, OUTPUT LEVEL	16				
WIRES							

DR 812 HAS FEW OPTIONS FOR INPUT AND OUTPUT CONTROL

INPUT OPTION 1. STEPPED INPUT GAIN

	VALUE	PCB	Qty	MOUSER	SIZE		NOTES
ROTARY SWITCHES							
1	11 STEP 1 POLE		8	10SM159			
RESISTORS							
	14K7	R1	8	271-14.7K-RC			
	4K99	R2	8	271-4.99K-RC			
	1K96	R3	8	271-1.96K-RC			
	1K24	R4	8	271-1.24K-RC			
	787R	R5	8	271-787-RC			
	511R	R6	8	271-511-RC			
	357R	R7	8	271-357-RC			
	249R	R8	8	271-249-RC			
	169R	R9	8	271-169-RC			
	200R	R10	8	271-120-RC			

INPUT OPTION 2. VARIABLE INPUT GAIN

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INPUT OPTION 2. VARIABLE INPUT GAIN

	VALUE	PCB	Qty	MOUSER	SIZE	
	25K Log		8			

OUTPUT OPTION 1. STRAIGHT-T PAD

	VALUE	PCB	Qty	MOUSER	SIZE	
POTENTIOMETERS						
	T PAD 600 ohm	Output Level Control Straight-T pad 1 Output Level Control Straight-T pad 2	8			

OUTPUT OPTION 2. BRIDGED-T PAD

	VALUE	PCB	Qty	MOUSER	SIZE	
POTENTIOMETERS						
	DUAL POT		8			
RESISTORS						
			16			

PARTS OPTIONS

	DESCRIPTION
DR 812 Main Board V1 Cart	Cart include all parts for main board, toggle switches and level leds. Cart not include POWER connector, XLR connectors, Audio Transformers, 2520 DOA, PSU parts, Output level control, Input gain control.
DR 812 Main Board Cart + Stepped Gain	Cart include all parts for main board, toggle switches, level leds, Input gain control (12 steps rotary switches and resistors) Cart not include POWER connector, XLR connectors, Audio Transformers, 2520 DOA, PSU parts, Output level control.
DR 812 Main Board Cart + Variable Gain	Cart include all parts for main board, toggle switches, level leds, Input gain control (25k Rev Log ptenimeters) Cart not include POWER connector, XLR connectors, Audio Transformers, 2520 DOA, PSU parts, Output level control.
Output Level Control Straight-T pad 1	Use it for Variable Output level control
Output Level Control Straight-T pad 2	Use it for Variable Output level control

BOM UPDATE HISTORY

DATE	DESCRIPTION
13.03.2020	BOM crated