



CAPACITORS								
Ref.	Value	Tol.	Type	Rating	Lead Spacing	Manufacturer	Manufacturer Part #	Qty.
C1	100n	10%	X7R	50V	5.0mm	Murata	RPER71H104K2K1A03B	2
C2	100n	10%	X7R	50V	5.0mm	Murata	RPER71H104K2K1A03B	
C3	68u	20%	Elec.	35V	2.5mm	Panasonic	EEU-FM1V680	2
C4	68u	20%	Elec.	35V	2.5mm	Panasonic	EEU-FM1V680	
C5	220u	20%	Elec.	63V	5.0mm	Panasonic	EEU-FC1J221S	1
C6	680u	20%	Elec.	35V	5.0mm	Panasonic	EEU-FM1V681	2
CB1	680u	20%	Elec.	35V	5.0mm	Panasonic	EEU-FM1V681	
CB2	10n	5%	Film	400V	5.0mm	Wima	MKP2G021001C00JSSD	1
CF	47p	5%	Film	1000V	5.0mm	Wima	FKP20100471D00JSSD	1
CZ	220p	2.5%	Film	100V	5.0mm	Wima	FKP2D002201D00HSSD	1

RESISTORS								
Ref.	Value	Tol.	Type	Rating	Manufacturer	Manufacturer Part #	Qty.	
R1	6.81K	0.1%	Metal Film	0.25W	IRC	66-RC55LF-D-6.81K	2	
R2	6.81K	0.1%	Metal Film	0.25W	IRC	66-RC55LF-D-6.81K		
R3	470Ω	1%	Metal Film	0.25W	Xicon	271-470-RC	3	
R9	470Ω	1%	Metal Film	0.25W	Xicon	271-470-RC		
R14	470Ω	1%	Metal Film	0.25W	Xicon	271-470-RC		
R4	100Ω	1%	Metal Film	0.25W	Xicon	271-100-RC	1	
R5	1.69K	1%	Metal Film	0.25W	Xicon	271-1.69K-RC	1	
R6	150Ω	1%	Metal Film	0.25W	Xicon	271-150-RC	2	
R12	150Ω	1%	Metal Film	0.25W	Xicon	271-150-RC		
R7	681Ω	0.1%	Metal Film	0.25W	Vishay/Dale	CMF55681R00BHEB	2	
R8	681Ω	0.1%	Metal Film	0.25W	Vishay/Dale	CMF55681R00BHEB		
R10	10K	1%	Metal Film	0.25W	Xicon	271-10K-RC	1	
R11	100K	1%	Metal Film	0.25W	Xicon	271-100K-RC	1	
R13	1M	1%	Metal Film	0.25W	Xicon	271-1.0M-RC	1	
RF	24.9K	1%	Metal Film	0.25W	Xicon	271-24.9K-RC	1	
RL	150K	1%	Metal Film	0.25W	Xicon	271-150K-RC	1	
RZ	5.1K	1%	Metal Film	0.25W	Xicon	271-5.1K-RC	1	

DIODES								
Ref.	Type	Application	V <sub>R(max)</sub>	I <sub>F(max)</sub>	Manufacturer	Manufacturer. Part #	Qty.	
D1	1N4148	Relay Back EMF Suppress	100V	0.3A	Fairchild	1N4148	3	
D2	1N4148	Relay Back EMF Suppress	100V	0.3A	Fairchild	1N4148		
D3	1N4148	Relay Back EMF Suppress	100V	0.3A	Fairchild	1N4148		
D4	1N4007	V+ Supply Protection	1000V	1A	Fairchild	1N4007	2	
D5	1N4007	V- Supply Protection	1000V	1A	Fairchild	1N4007		

TRANSISTORS						
Ref.	Type	Application	Comments	Mfr.	Mfr. Part #	Qty.
Q1	BC560C - PNP	General Purpose	DI Input Relay	Fairchild	BC560C	1

ELECTROMECHANICAL				
Ref.	Description	Manufacturer	Manufacturer Part #	Qty.
RL1	-20dB Input PAD Relay	Panasonic EW	TQ2-12V	3
RL2	MIC/DI Auto-Switching Relay	Panasonic EW	TQ2-12V	
RL3	Polarity Reversal Relay	Panasonic EW	TQ2-12V	
RV1	25K CCW AT Gain Pot	Bourns	51CAN-D20-G17L	1
SW1	DPDT Push Button for +48V	C&K	F2UEE	3
SW2	DPDT Push Button for PAD	C&K	F2UEE	
SW3	DPDT Push Button for POL	C&K	F2UEE	

MISCELLANEOUS				
Ref.	Description	Manufacturer	Manufacturer Part #	Qty.
LED1	+48V RED LED - 2.2V, 20mA	Panasonic - SSG	LN222RPH	1
LED2	PAD GRN LED - 2.2V, 20mA	Panasonic - SSG	LN322GPH	1
LED3	POL AMB LED - 2.2V, 20mA	Panasonic - SSG	LN422YPH	1
JMP1	4 Pin Header - TX1 Ratio	FCI	68001-104HLF	1
JMP2	2 Pin Header - DOA DC Block	FCI	68001-102HLF	1
JUMPERS	Shunts for JMP1 & JMP2	3M	929953-30	3
SOCKETS	PCB Sockets for DOA	Mill-Max	0357-0-15-01-34-27-10-0	6
TX-HDWR	Mounting Hardware for TX2	Whistle Rock Audio	TX-HDWR	1
SW1-CAP	White PB cap for SW1	C&K	F0102	1
SW2-CAP	Gray PB cap for SW2	C&K	F0104	1
SW3-CAP	Black PB cap for SW3	C&K	F0101	1
KNOB	Knob for RV1 - 1/8" shaft	-	-	1
U1	Discrete Op-Amp	Whistle Rock Audio	ML2520/ML918 or other	1
TX1	Input TX API 2622 type	-	-	1
TX2	Output TX API 2503 type	-	-	1
PCB	ML12 v3.1 PC Board	Whistle Rock Audio	ML12-PCB	1

MOLEX CONNECTION KIT				
Ref.	Description	Manufacturer	Manufacturer Part #	Qty.
J1	5 conn friction-fit PCB (M) header	Molex	22-11-2052	2
J2	5 conn friction-fit PCB (M) header	Molex	22-11-2052	
J3	2 conn friction-fit PCB (M) header	Molex	22-11-2022	3
J4	2 conn friction-fit PCB (M) header	Molex	22-11-2022	
J5	2 conn friction-fit PCB (M) header	Molex	22-11-2022	
HS-2PIN	2 conn wire terminal (F) housing	Molex	22-01-2027	3
HS-5PIN	5 conn wire terminal (F) housing	Molex	22-01-2057	2
Crimp Terminals	Gold contact crimp terminals	Molex	08-55-0102	16