

Tubelab Universal Driver Board Parts List:

RESISTORS:

LOC	WATT	VALUE	Mouser #
R1	.25W	100K	
R2	.25W	1K	
R3	.25W	100 ohm	
R4	Trimmer	1K	652-3309P-1-102
R5	.25W	1K	
R6	2W	43K	
R7	2W	43K	
R8	.25W	1K	
R9	Note 1	120K	
R10	Trimmer	100K	652-3309P-1-104
R11	Note 2	120K	
R12	.25W	100 ohm	
R13	Trimmer	1k	652-3309P-1-102
R14	.25W	1K	
R15	.25W	1K	
R16	.25W	1K	
R17	3W	20K	
R18	3W	20K	
R19	Note 3	120K	
R20	Note 3	DNP	
R21	Note 3	120K	
R22	Note 3	DNP	
R23	2W	10K	
R24	Note 4	47K	
R25	Note 4	DNP	
R26	Note 4	4.7K	
R27	Note 4	DNP	
R28	.25W	470K	
R29	.25W	1K	
R30	3W	12K	
R31	.25W	1k	
R32	.25W	470K	
R33	Note 4	47K	
R34	Note 4	DNP	
R35	Note 4	DNP	

R36	Note 4	4.7K		
R37	Trimmer	100K		652-3309P-1-104
R38	3W	12K		
R39	Note 3	120K		
R40	Note 3	120K		
R41	Note 3	DNP		
R42	Note 3	DNP		
R43	Trimmer	100K		652-3309P-1-104
C1		.47uf 450V	Mylar	667-ECW-FD2W474Q1
C2		.1uf 630V		F861AP104M310C
C3		22 uF 500 V	Electrolytic	80-ESH226M500AL4AA
C4		.47uf 450V		667-ECW-FD2W474Q1
C5		.47uf 450V		667-ECW-FD2W474Q1
C6		.1 uF 630 V	coupling cap	
C7		.1 uF 630 V	coupling cap	
C8		.47uf 450V		667-ECW-FD2W474Q1
C9		.47uf 450V		667-ECW-FD2W474Q1
C10		.47uf 450V		667-ECW-FD2W474Q1
IC1	IXCP10M45S			747-IXCP10M45S
IC2	IXCP10M45S			747-IXCP10M45S
IC3	LM4041C12ILP			595-LM4041C12ILP
IC4	LM4041C12ILP			595-LM4041C12ILP
Q1	NDF04N60ZG-001			863-NDF04N60ZG-001
Q2	NDF04N60ZG-001			863-NDF04N60ZG-001
LMP1	NE-2			606-C2A
V1	6CG7			
V2	6CG7			

Plate load for V1, value depends on B++ supply voltage and tube choice

Plate load for V1, value depends on B++ supply voltage and tube choice

Value depends on NEGATIVE MOS supply voltage, need 1 to 2 mA, so 500 ohms to 1 K per volt

Value depends on POSITIVE MOS supply voltage, need 1 to 2 mA, so 500 ohms to 1 K per volt

Plate load for V2, value depends on B++ supply voltage, feedback and tube choice

Plate load for V2, value depends on B++ supply voltage, feedback and tube choice

Experimental feedback resistors from output tube plates. Each resistor must be rated for the full

Experimental feedback resistors from output tube plates. Each resistor must be rated for the full

Experimental feedback resistors from output tube plates. Each resistor must be rated for the full

Experimental feedback resistors from output tube plates. Each resistor must be rated for the full

R24 and R33 set the maximum NEGATIVE bias voltage Not used (open) for screen drive (positive

R25 and R34 set the minimum POSITIVE grid voltage for screen drive. Not used for G1 drive

R26 and R36 set the negative voltage reached when the bias is set for maximum tube current. Try

R27 and R35 set the positive voltage reached when the bias is set for maximum tube current. Try

Sets the idle current through the mosfet. You want 10 to 20 mA at idle, less if there is a second

R24 and R33 set the maximum NEGATIVE bias voltage Not used (open) for screen drive (positive

R25 and R34 set the minimum POSITIVE grid voltage for screen drive. Not used for G1 drive

R27 and R35 set the positive voltage reached when the bias is set for maximum tube current. Try

R26 and R36 set the negative voltage reached when the bias is set for maximum tube current. Ty

Sets the idle current through the mosfet. You want 10 to 20 mA at idle, less if there is a second  
Experimental feedback resistors from output tube plates. Each resistor must be rated for the full  
Experimental feedback resistors from output tube plates. Each resistor must be rated for the full  
Experimental feedback resistors from output tube plates. Each resistor must be rated for the full  
Experimental feedback resistors from output tube plates. Each resistor must be rated for the full

You want an N channel 600 volt or higher mosfet with a Crss below 10pF that stays constant over  
These things go extinct in a year or two because better ones appear. Today's choice will not be h

I output stage B+ voltage.  
I output stage B+ voltage.  
I output stage B+ voltage.  
I output stage B+ voltage.

grid)

ypically not used in screen drive  
pically not used in G1 drive

ry current path like a screen grid

grid)

pically not used in G1 drive

ypically not used in screen drive

ry current path like a screen grid

I output stage B+ voltage.

r the voltage range used.

ere for long.