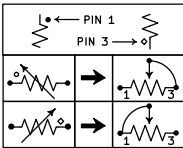
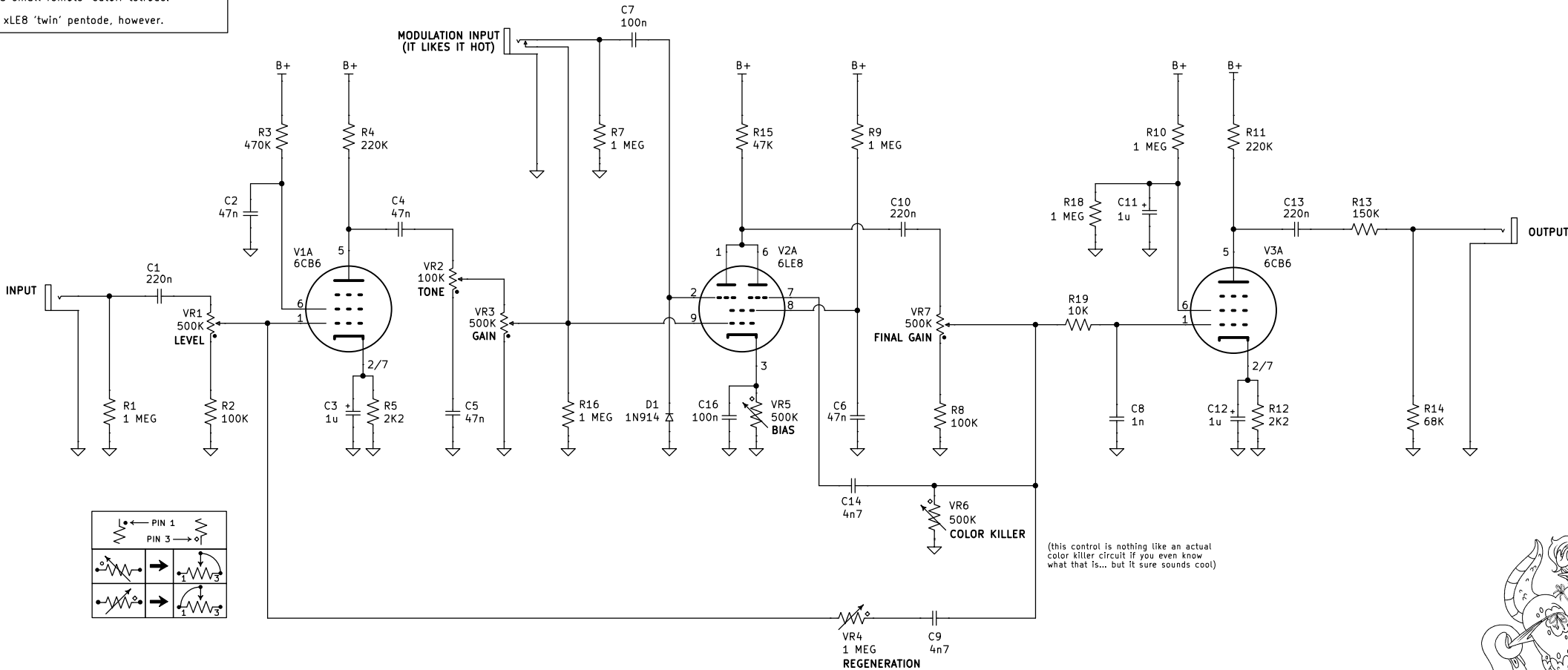


V1 and V3 can also be almost any 7CM or 7BK-base, 6 volt filament, remote-cutoff small pentode. 6AU6 or 6BZ6 will give a more mellow distortion with less spontaneous self-oscillation. 6AK5/5654 or 6X1Π(6J1P) will scream and howl. I specifically chose 6CB6 because they're fucking awesome.

Hell, try it with some sharp-cutoff small pentodes, or even a 6CY5 small remote-cutoff tetrode.

V2 MUST be a xLE8 'twin' pentode, however.

EQUIPMENT BUILT FROM DIAGRAM AND OPERATIONALLY VERIFIED 26 AUGUST 2025



DISCLAIMER:

PROVIDED WITH NO GUARANTEES, WARRANTIES, OR SUPPORT FROM EITHER TOW OR DISASTER ELECTRIC.

UNLESS OTHERWISE NOTED:  
ALL RESISTORS SHALL HAVE A POWER RATING OF 1/2 WATT OR HIGHER.  
ALL RESISTOR TOLERANCES SHALL BE 10% OR LESS.

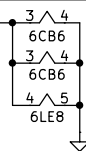
ALL CAPACITORS SHALL HAVE A VOLTAGE RATING OF 63V OR MORE.  
ALL CAPACITOR TOLERANCES SHALL BE 20% OR LESS.

6CB6 (most small-signal pentodes, but verify against datasheets) filaments will pull about 300mA.

The 6LE8 filament is a HUNGRY motherfucker and will pull about 750mA. Double that from a cold start for a few seconds before it warms up.

You are more than welcome to use the 10LE8 or 15LE8 instead for lower filament current draw, but you will have to adjust your filament supply accordingly.

6 VOLTS AC OR DC



CIRCUIT DESIGN AND DRAWING BY TOW AT DISASTER ELECTRIC.

SEARCH HERE FOR THE 6CB6 6LE8 6AU6 6BZ6 6AK5 5654 6X1P 6J1P 6CY5 6X4 6X5 6X6 6X7 6X8 6X9 6X10 6X11 6X12 6X13 6X14 6X15 6X16 6X17 6X18 6X19 6X20 6X21 6X22 6X23 6X24 6X25 6X26 6X27 6X28 6X29 6X30 6X31 6X32 6X33 6X34 6X35 6X36 6X37 6X38 6X39 6X40 6X41 6X42 6X43 6X44 6X45 6X46 6X47 6X48 6X49 6X50 6X51 6X52 6X53 6X54 6X55 6X56 6X57 6X58 6X59 6X60 6X61 6X62 6X63 6X64 6X65 6X66 6X67 6X68 6X69 6X70 6X71 6X72 6X73 6X74 6X75 6X76 6X77 6X78 6X79 6X80 6X81 6X82 6X83 6X84 6X85 6X86 6X87 6X88 6X89 6X90 6X91 6X92 6X93 6X94 6X95 6X96 6X97 6X98 6X99 6X100

THE TOWER VACUUM-TUBE PREAMP AND MODULATOR.

Size: USLegal Date: 2025-08-15

Rev: 3

KiCad E.D.A. 9.0.4

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