I sketched out the Reverb 1500 circuit for my client, so I thought you might like to read my description. It's written for him, so it has more explanation than you need, of course.

All the inputs are summed to one point with buffer resistors isolating the various inputs from one another. All tone control is done BEFORE any amplification, so it's going to load the guitar pickups, depending on setting. This is NOT like the Mark X. (Typically, in guitar amps, you have one gain stage, followed by tone controls, followed by another gain stage.)

From this point, the signal splits to the transistor Reverb Driver board and the input of V1 (12AX7).

The first triode of V1 (V1A) is where it gets REALLY nasty.

The way they managed an amp with so few gain stages is to try to squeeze all the gain the could from every point. One way to do this is to use high impedances to ground since you get less loss to ground. However, the drawback of this is vulnerability to noise and sensitivity to any stray capacitance.

The grid of V1A has a 10 Megohm grid resistor to ground. Then, the cathode resistor of this triode is--drum roll--the Reverb Level pot, which varies from 8 to 500 Ohms DC resistance as you vary the setting. The reverb signal from the tank, thus, gets injected into the V1A cathode--along with any noise it picks up along the way.

The plate resistor of V1A is 1.5 Meg (100k-220k is more normal) to get more gain. Of course, this means the tube can hardly drive anything, so they have to up the impedance of the NEXT stage by adding a 560k resistor, making the input impedance of V1B about 900k Ohms.

From there on, it's pretty normal, but if you showed this to me as a schematic, I'd tell you I'd be shocked if it didn't hum. I've never seen anything quite like it.

To me, this design is crazy especially since it lacks any attempt at shielding.

Running high impedance signal leads bundled with non-twisted heater wiring??

A pot as a cathode resistor in a low-level, high gain stage???

Insane...