

System 11 Wifi App Note:
Williams/Bally System 11b and 11c
Speakers making noise during power up

Version 0.1

What is this for?

Some system 11b and 11c game sound boards makes a tone, hiss or downright screech when the game is powered on. Typically that does not occur every time the game is power up and some games never make a sound.



Why?

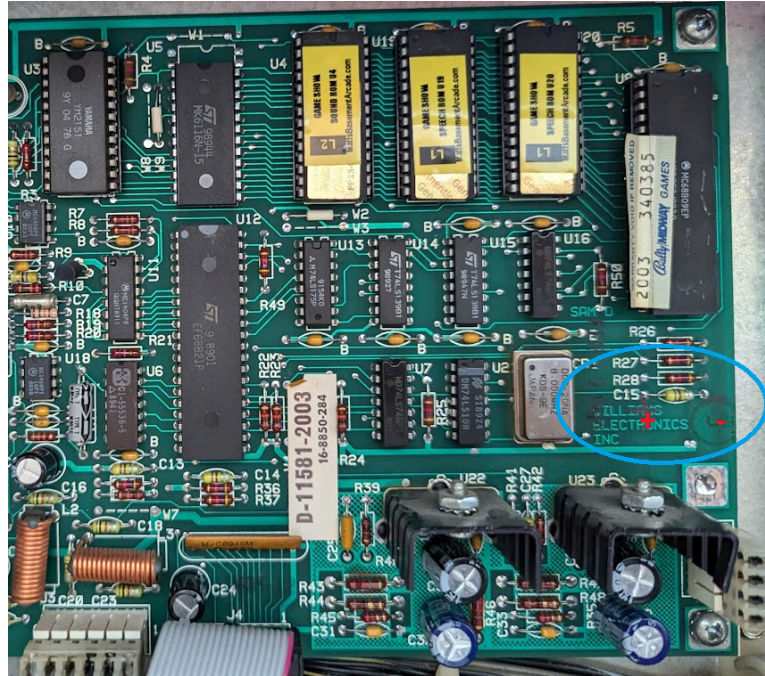
The sound board reset circuit does not always do a good job of putting the board in a stable state at power up. The key capacitor on the board is tired after many years of hard work in the game. If your game does this with Warped Pinball installed it probably did it before as well. The difference is that the Warped Pinball board delays the mainboard start up by a few seconds and those few seconds can be filled with crazy noise.

What should I do?

Well, you don't have to do anything. It's just the speaker sound and won't hurt anything except maybe your ears. So if it's not too bad and you don't mind just carry on. If you want to get rid of this sound we have two options. 1) You can add a capacitor to the sound board right on top of (in parallel with) the existing cap. A 4.7uF 10 volt or more works well. Or 2) You can add a jumper wire from the Warped Pinball board to the reset capacitor (no soldering required). The aux reset out circuit added in Warped Pinball Version 4 board will reset the sound board early in the boot process.

See below for pictures of both methods and to locate the position of the capacitor and connection points.

1) Capacitor location on the sound board (this board is in the upper left part of the backbox). Note the polarity marked on the photo. If you add a polarized capacitor please follow these polarity marks. A 4.7uF 10 volts or higher capacitor works well. You can solder on top of (in parallel with C15).



2) Add a jumper from the aux reset test point on the Warped Pinball SYS11.Wifi board to the left side of C15 on the sound board.

