Spin Semiconductor

8 programs for guitar amp demo board:

pot0 = reverb level
pot1 = variable
pot2 = effects level

#	program	reverb	variable	effect level
0	chorus	reverb	rate	level
1	flange	reverb	rate	level/regen
2	tremelo	reverb	rate	depth
3	echo	reverb	delay time	level
4	echo/rpt	reverb	delay time	level
5	wah	reverb	sensitivity	level/peaking
6	vibrato	reverb	rate	level
7	phase	reverb	rate	width

The nominal signal driving into the FV-1 circuit should be about 0.5V pk. This allows headroom for effects like the wah program, which may clip the output. The signal into the FV-1 should be the result of any pre-emphasis/distortion/deemphasis circuits, so that the level is consistent. Do NOT attempt to apply distortion AFTER the FV-1!

The FV-1 output should be run directly to the power amp, or preferably, through an output 'power control' pot.

These programs are demonstration programs only; they can be changed in just about any way to suit your application. In fact, each amplifier design has its own characteristics that can be modified by slight changes in FV-1 code.

The built-in FV-1 programs are for guitar (1, 2 and 3), karaoke (4 & 5), and reverb for consoles (7 & 8). Program 6 (logic code 5, 101) is a test program that is not intended to be used.

When the board is oriented with the selector switch to the left, and the adjustment knobs on the right, the internal programs are selected when the selector knob is pointing toward the left, with the first program at the bottom, at the 7:00 position. The first program of the external programs, the ones defined above, are found when the knob points to the right, with the first program at the 1:00 position.

The reverb and effects level pots can be effectively shorted to ground by external footswitches. The control inputs to the FV-1 are protected by resistors on the PC board. The FV-1 control inputs are quite immune to hum and noise, due to their low pass characteristic, so special sheilding or bypassing of the control inputs is not required.

Finally, if you have at least one good bypass cap across the FV-1, it should gererate very little RFI, making the FCC tests for interrference very easy. In fact, other processors can cause quite a lot of RFI, but internal bypass capacitors and careful design of the FV-1 makes it especially good in this regard.

The power supply should be a clean +5V.

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