

CARTRIDGE DIY KIT

Kit is was introduced for designing custom effects for Cartridges in Solar 50 and Console pedals.

The kit includes.

- USB programmer
- 2 Cartridges with microchip slot
- 2 EEPROM chips (Microchip 24LC32A)

Solar 50 uses FV-1 chip by a company SpinSemiconductors.

If you have skills in programming, you can use the application from manufacturer of the DSP chip. It a free software which can be downloaded from <http://www.spinsemi.com/>

If you are not a programmer, you can use SpinCAD application by HolyCityAudio. SpinCad has many blocks, which you can connect in any way, and built your effects. SpinCad also has a simulator, so you can test how effect changes the audio before loading to the Cartridge.

There are 8 effect slots in FV-1 chip, but Solar and Console units uses 3.

1st program in slot #5

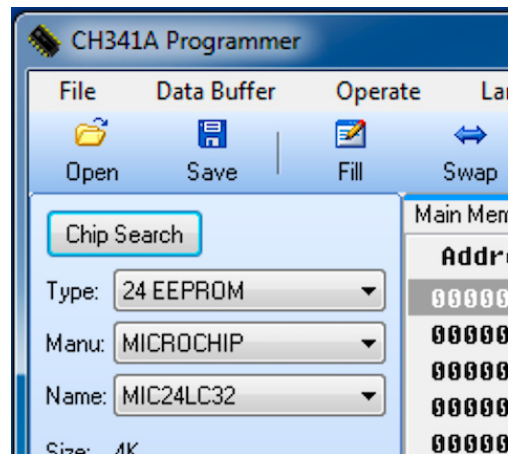
2nd program in slot #3

3rd program in slot #7

When your Effects program is ready, you should save it as a hex format file «.hex» extension.

Then you can use the CH341A USB Programmer to load your effects (.hex file) in the chip for a Cartridge.

To load hex file to the chip you can use any special program, for example CH341A programmer. In the application choose model of the programmer (see image below).



Connect your programmer, then put EEPROM into it.

Click "erase" to clear the EEPROM.

Open your hex file, and then click "write", to load the effect into EEPROM chip. Then click "verify" to check if the program was written correctly.

Then you can put a chip into the cartridge to use in Solar 50 or Console pedal.



Check the dot to be in that position.