## **FX-Tracker Firmware Version 2.1 Upgrade**

## Fixes in this version:

- 1) All the changes up through version 2.0
- 2) There was a math error in the DSP code that has been fixed. The symptoms of this error included:
  - A. Multiple delays with feedback did not completely fade away. There was a very small amount of sound remaining in some cases.
  - B. For various effects, it caused a very small amount of zero-crossing distortion.
- 3) Effect number 65 was improved so that it reacts better to your playing volume changes

## Upgrade procedure:

Note: This procedure should only take a few minutes. You need to be familiar with how to send and receive MIDI sysex files to and from your computer. Do not disconnect the MIDI cable, disconnect or turn off the power to FX-Tracker or interrupt the MIDI transfer as this could cause problems. In the worst case, this could yield a non-working device that will need to be re-loaded with firmware at the manufacturer.

- 1) If you want to keep your current presets, connect the MIDI output from FX-Tracker to the MIDI input of your computer. Then set the MIDI channel to zero and press the left control knob. This will send a sysex dump of all your presets to your computer when using a program such as the FX-Tracker editing software or MIDI-OX. Make sure to save the sysex file. See the FX-Tracker users manual for more information.
- 2) Disconnect the MIDI output from FX-Tracker.
- 3) Connect the MIDI output from your computer to the MIDI input on FX-Tracker.
- 4) Turn on FX-Tracker while pressing down on the left control knob. The display should show the current firmware version '10', '1.1', '1.2' or '2.0'. Then release the control knob.
- 5) Dump the MIDI sysex file called "FX-Tracker\_firmware\_v21" to FX-Tracker using a program such as the FX-Tracker editing software or MIDI-OX. This may take a few minutes.
- 6) After the MIDI sysex file is completely received by FX-Tracker, the display should show 'F0' for a few seconds. The display will then cycle from F1 F8 and then finally show '88'.
- 7) Turn off FX-Tracker and then turn it on. The display will cycle from 0-99 and 0-19 twice. The factory presets will not be re-loaded. See how to do this below.
- 8) Next, turn off FX-Tracker. You can then turn on FX-Tracker while pressing down on the left control knob. The display should now show '2.1'. This means that the version 2.1 firmware is now loaded.
- 9) Turn off FX-Tracker to complete the upgrade.
- 10) You can now restore your user presets or re-load the factory presets by setting the MIDI channel to zero and sending the "FXTracker\_Factory\_Presets\_v2\_0" sysex file to FX-Tracker using a program such as the FX-Tracker editing software or MIDI-OX. See the FX-Tracker users manual for more information.

Note: This procedure has been tested using a midiman USB port.