## Voice Conservation

Do you find that your EmulatorX/ProteusX is dominating your CPU usage? Is your voice count meter showing 60-100 voices, even when playing single presets? Are notes clipping whenever you play a multi-timbral sequence? Fear not, the remedy is here!

The **Poly Key** options (located in the Voice Processing page) limit the number of times a voice can be played when the same key is repeatedly pressed. With **Poly All** selected (the default setting), it's easy to chew up large numbers of voices without even realizing it. This option creates a type of chorus effect which is sometimes desirable, but is very wasteful of the available (and finite) polyphony. By selecting one of the Poly Key groups, the preset will use far fewer voices and usually without any reduction in sound quality.

Your library of EmulatorX/ProteusX sound banks can be easily modified to be MUCH less wasteful of the available voices.

## To Conserve Voices in a Preset:

- 1. Select the preset you wish to modify.
- 2. **Play a single key** on your MIDI keyboard and check the indicator at the bottom of the window to find out how many samples are assigned to each



- 3. Click on the (+) symbol in the Tree to open the modules for the preset.
- 4. Click on the **Voice Processing icon** (synthesizer controls) module appears.



5. Check to make sure the Voice Selector reads "All". This is to make sure that the changes you make will affect all voices in the preset.

Poly All	Poly 2 C	Poly Key 8 C	Poly Key 4 D
Poly16 A	Poly 2 D	Poly Key 8 D	Poly Key 3 A
Poly 16 B	Mono A	Poly Key 6 A	Poly Key 3 B
Poly 8 A	Mono B	Poly Key 6 B	Poly Key 3 C
Poly 8 B	Mono C	Poly Key 6 C	Poly Key 3 D
Poly 8 C	Mono D	Poly Key 6 D	Poly Key 2 A
Poly 8 D	Mono E	Poly Key 5 A	Poly Key 2 B.
Poly 4 A	Mono F	Poly Key 5 B	Poly Key 2 C
Poly 4B	Mono G	Poly Key 5 C	Poly Key 2 D
Poly 4 C	Mono H	Poly Key 5 D	Poly Key 1 A
Poly 4 D	Mono I	Poly Key 4 A	Poly Key 1 B
Poly 2 A	Poly Key 8 A	Poly Key 4 B	Poly Key 1 C
Poly 2 B	Poly Key 8 B	Poly Key 4 C	Poly Key 1 D

6. **Press the Assign Group button.** The popup menu shown below appears. (The Poly Key options are highlighted for clarity.)

- 7. The Poly Key options limit the number of times a voice can be played when the same key is repeatedly pressed. Poly Key 8 groups allow 8 voices per key (mono or stereo); Poly Key 1 groups only allow a single voice per key to be played (mono or stereo).
- 8. Start with a Poly Key Group **twice the number of the samples used** by a single key. If this sounds too thin, try three times the samples used by a key and so on. Poly Key Groups of less than the number of voices per key will probably change the sound of the preset in an undesirable way.
- 9. Experiment with the different group numbers to find one that works best for the particular preset.
- The different letter groups (A-B-C-D) allow you to assign different Poly Key Groups to multiple voices assigned to the same ke