Fantom Tweakbook

Artemiy Pavlov

Getting the most out of the Roland Fantom-S, Fantom-X,
Juno-G and SonicCell synthesizers

5th edition

Fantom Tweakbook

This book is intended for people who want to explore the deepest corners of their Fantom-S, Fantom-X and Juno-G synthesizers from Roland. It opens many invaluable sound design secrets in form of deep but easy-to-read, illustrated articles on synthesis, effects processing and sampling. Additionally provided are lots of example patches, templates, raw sample materials and audio demonstrations.

The Fantom Tweakbook covers an overwhelming amount of topics, including subtractive, additive and vector synthesis, ring modulation, analog sound replication, envelope, LFO and matrix modulation, using effect processors as synthesis blocks, sampling and re-sampling, advanced processing of internal and external sounds, using in conjunction with other gear and much beyond. Combined with featured dictionary and parameter map, it is a great knowledge resource for both newbie and hardcore Roland users.

Copyright

All contents and materials of this book are copyright 2004-2008 Artemiy Pavlov, all rights reserved. Redistribution or publishing of this book in whole or part, in any form, without an agreement with the author is strictly prohibited and is subject to prosecution by law.

About The Author

Artemiy Pavlov was born in 1981 in Kharkov, Ukraine, in a family of an electronics engineer and a math teacher, both of which were also musicians. He naturally paid a lot of interest in sound both as an art and as a physical phenomenon, and nowadays it's both his passion and profession. In the field of sound design and development, Artemiy worked with companies like Roland, Native Instruments and Spectrasonics, and created a number of successful products for his own Sinevibes, such as books, sound libraries and software plug-ins. He also is a PhD student at the Kharkov National University of Radioelectronics, doing research in the field of electromagnetism and artificial structures. Artemiy is married since 2001, with two daughters born 2004 and 2007.

You can read more about Artemiy Pavlov at these sites:

- www.artemiypavlov.com
- www.sinevibes.com
- www.sineshine.com

Contents

Introduction **5**

Everything Out Of Nothing **7**

Unisonic 7
Wave arithmetics, part 1 8
Addi(c)tive synthesis 9
Delayed tones 10
Flange ensemble 11
Ring the bell 12
Low modulator 13
Lord of the ring (modulator) 13
What's that noise? 15
Wave buster 15
Syncopea 17
The steeper, the better 18
Count to 303 19
A different filter 20
Can you see a DC? 22
Selfish oscillation 23
Buenos notches 24
Stereotonic 25

Modulation Magic **26**

Pitch envelope vs. TVF/TVA envelopes 26
Shaping envelope and LFO forms 26
Get clicky 27
Deeper pitch slides 28
Retro beatbox 29
Sequential world 31
Wave arithmetics, part 2 32
Controlled time stretching 34
Freeze, froze, frozen 35
Left plus right 36
Vectorize 37
LFO by LFO 38
Envelope'd LFO 39
Vari-filter 40
Velocity games, part 1 41
Velocity games, part 2 42

Monster FX **44**

A fat recipe 44
Acid empire 44
Talking synth 45
Monster filter 46
Triple notch 48
Time machine 48
Moving shadows 49
Be shifted 50
True Lo-Fi 51
Infinity 52
Effected tail 52
Six voices 53

Tweak, Sample, Repeat 54
"Doctor, they are everywhere!" 55
Han Solo 55
D-tune 58
Feedback wizardry 58
Synthisphere 59
Antiverb 61
Partially processed 61

COSMic Synthesis 62
COSMic filter 62
LFO to MFX 64
Phase control 65
Retro Sci-Fi 66
Key gate 68

Recording Trick-o-logy 69
Rock your Fantom 69
Sound multiplication 70
External processing 70
External vocoding 71

Dictionary 73

Parameter Map 74

Acknowledgements 77