



THE DARK ZEBRA

AND

ZEBRAHZ



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Introduction

The Dark Zebra

A bank of over 400 presets, a collaboration between Hans Zimmer and Howard Scarr. Practically all Zebra sounds in the *The Dark Knight* as well as *The Dark Knight Rises* soundtracks are included, plus several more that didn't quite fit it into the scores. Some of the more recent presets make use of the extra features available in ZebraHZ.

You will find a list of all The Dark Zebra presets at the end of this document.

ZebraHZ

ZebraHZ started life as Hans Zimmer's customized version of Zebra2.5, with several of the requested features on board: classic analogue filter models like in *Diva*, a resonator effect module like in the old *Polymoog*, polyphonic compressors (per lane in the grid – especially good for drum sounds!) and two more mod-mappers. At this point in time, ZebraHZ is a free upgrade specifically for owners of *The Dark Zebra* patch set.

Installation

Installation is easy: double-click the appropriate installer (i.e. for Mac or PC) and follow the instructions. To update to a more recent version, simply install over the existing one. If you have added your own presets, back up them up first – better safe than sorry!

Important: ZebraHZ uses the same registration code as Zebra2. Load an instance of ZebraHZ, right-click on the data display then select *enter registration code*. If you can't find your Zebra2 reg code, go to [u-he support](#) and either select *I just need to know my serial numbers* or log in then select *Zebra 2.x [Send me my serial number]*.

File Locations

Win	Presets	...\VstPlugins\u-he\ZebraHZ.data\Presets\ZebraHZ\
	Preferences	...\VstPlugins\u-he\ZebraHZ.data\Support\ (*.txt files)
	MSEG/OSC	...\VstPlugins\u-he\ZebraHZ.data\Modules\
Mac	Presets	MacHD/Library/Audio/Presets/u-he/ZebraHZ/
	Presets (user)	[you]/Library/Audio/Presets/u-he/ZebraHZ/
	Preferences	[you]/Library/Application Support/u-he/com.u-he.ZebraHZ...
	Resources	MacHD/Library/Application Support/u-he/ZebraHZ
	MSEG/OSC	MacHD/Library/Application Support/u-he/ZebraHZ/Modules/ (you might have to copy MSEG+OSC folders from .../Zebra2.data/Modules !)

Note: The precise locations depend on your installation paths.

Read Me!

- ZebraHZ supports **AU**, **VST2**, **VST3** (not yet recommended) and **AAX**. There is no RTAS version, but RTAS / Mac users should still be able to load TDZ presets into the regular Zebra2 and achieve acceptable results. Please note, however, that TDZ presets loaded into the regular Zebra2 are likely to sound wrong as several ZebraHZ-specific features are missing.
- ZebraHZ updates will appear in the user area at [u-he support](#). We recommend setting up an account there.
- To run ZebraHZ you will need a registered Zebra2. The product you purchased is the **soundset The Dark Zebra**. ZebraHZ is an update for Zebra2 so you can use all the Dark Zebra patches. Of course this means that resale of Dark Zebra is only allowed if you also include your Zebra2 license in the sale. Note that you can run Zebra2 and ZebraHZ in parallel.
- ZebraHZ and Zebra2 require a registration code issued after mid-2009. If yours is older, go to [u-he support](#) and request a new one – if your email address has changed in the meantime, please let us know. If you can't remember when you purchased Zebra2, please retrieve your original reg code before upgrading.

Note: You can't break anything. If you start Zebra2 with an obsolete code, it will ask you to contact support@u-he.com so we can send you a new one. As always, right-click on the data display to enter your registration code.

License Agreement and Terms of Use

This license agreement is between you (the licensee) and **Heckmann Audio GmbH**, the copyright holder and sole distributor of **The Dark Zebra** patch set. This agreement is based on the common understanding that copyrighted material must not be distributed without the written consent of the copyright holder, and therefore that anyone intending to lend, copy or otherwise distribute this material will have read this agreement before downloading, purchasing or otherwise obtaining the product accompanying the license.

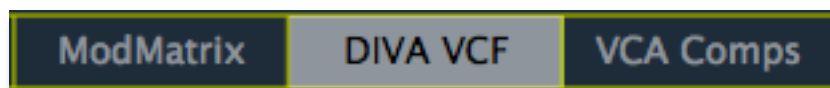
Stipulations:

1. Before using this patch set, you must have purchased a legitimate license for **Zebra2** as well as for **The Dark Zebra**.
2. You may not distribute resampled or otherwise replicated patches from **The Dark Zebra** in any product, commercial, free or otherwise. This includes, but is not limited to, sample libraries and sample-based synthesizers. You may, however, create such derivatives for your own musical works as long as these derivatives are only distributed in the context of the musical work.
3. **The Dark Zebra** license may only be sold together with the **Zebra2** license.

DIVA VCF

ZebraHZ is a bit of a Frankenstein's monster. Under the circumstances, the Diva-style filters were integrated into the GUI in the best way possible: Not in the generator rack like the other filters, but as tabbed panels in the lower area (like the MSEGs).

ZebraHZ offers a total of 8 Diva-style filters: 4 highpass and 4 lowpass / multimode. To access the controls, click on the **DIVA VCF** button to the right of the lower bar:



general settings

At the far left of the DIVA VCF panel are the following general filter options:

- **Accuracy** is a very important global parameter, as it trades CPU-hit for realtime audio quality (especially resonance). If your computer stutters while playing presets that use D-filters, switch the accuracy mode to *fast* or even *draft*. You will soon learn which one your system can handle. Monophonic presets should be no problem, even on older computers.
- **OfflineAcc** is the accuracy used for offline audio rendering. You should generally render tracks to audio in the highest quality – to do this, set *OfflineAcc* to *best*. If you find that your sound works best in Draft mode (e.g. because it is meant to be gritty), feel free to switch this to *Same*.
- **RandomCutoff** is a button that generates new random values for *CutoffSlop*...
- **CutoffSlop** scales the amount of “random” applied to all D-filter cutoff frequencies.

HPF settings

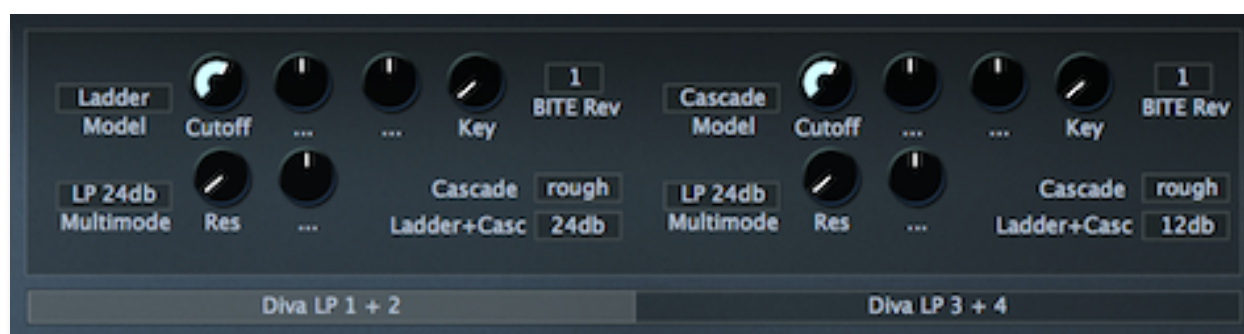


Next are the panels for the Diva **highpass filters** which are tabbed like the MSEGs: To switch panels, click on e.g. *D-HPF2*. There are two basic highpass models:

- **HPF PRE** is the simplest analogue model. The Res and Revision settings are ignored.
- **HPF BITE** is a “character” highpass with cutoff modulation and resonance controls. This is the more CPU-hungry option, so you can expect some powerful tonal shaping. Two *Revisions* are available, with different characteristics.

For more detailed information about these filters, please refer to the [Diva manual](#).

LPF settings



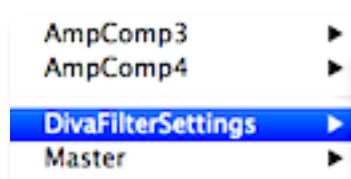
The righthand side of the panel is for the main D-filters. They are shown in pairs that are switched via the long buttons at the bottom, *Diva LP1+2* / *Diva LP3+4*. Each filter has only three fixed-function knobs: Cutoff, Res (resonance) and Key (key follow).

The central knobs labeled “...” are modulation depths for a definable source i.e. you can click on them and select any modulation source you like. The upper two both control cutoff, the lower one controls resonance.

There are 4 basic Models – *Ladder*, *Cascade*, *Multimode* and *BITE*:

- **Ladder:** Classic 24dB / 12dB per octave, with key-follow and resonance controls. Click on the button labelled *Ladder+Casc* to switch between 24dB (4-pole) and 12dB (2-pole).
- **Cascade:** A cleaner sounding filter than *Ladder*, but with a dedicated switch (the one labelled *Cascade*) used for selecting a sub-type of this filter model. Cascade can also be switched into 12dB / octave mode using the *Ladder+Casc* button.
- **Multimode:** The *Multimode* is based on the filter in yet another classic polyphonic synthesizer (or two)! Use the button labeled *Multimode* to select one of the following:
 LP4 – a 4-pole low pass
 LP2 – a 2-pole alternative
 HP – a full-spec high-pass
 BP – band-pass (removes both high AND low frequencies).
- **BITE:** This one sounds **very** different. The tone is highly dependent on input signal levels, the selected revision (BITE Rev) and the value of Res (resonance). Like the corresponding highpass, the lowpass BITE filter is a real character, able to deliver anything from solid 2-pole to screaming mayhem.

important!



While editing the matrix, please do not select anything you see in the *DivaFilterSettings* submenu. This is a remnant of porting the filters from Diva, and is likely to cause trouble if you mess around with it.

Compressors

Each lane in the main grid has its own polyphonic (i.e. per voice) compressor. Like the Diva-VCF, all controls appear in the lower area.

Click on **VCA Comps** to open the following panel (only two of the four are shown here):



On/Off

The lane compressors can be switched off individually to conserve CPU.

Mode

eco: original lo-fi version, with low CPU-hit.

smooth: smooth compression, the best choice for most sounds.

strong: very powerful compression, best for bold percussive sounds.

Attack

The time it takes the compressor to fully work after the threshold has been reached. Attack can affect brightness – very fast values cause the compressor to reduce gain immediately, which can dull the attack of the original sound. When set to zero, Attack is only one sample in length.

Release

Recovery time i.e. the time the compressor takes to return to unity gain after the input signal has fallen below the threshold. Very short release can distort low-frequency input, overly long release can ‘clamp’ the sound down and not release enough before the next ‘attack’ arrives. When set to zero, the release is only one sample long.

Threshold

Sets the level above which compression will be applied, and below which compression will be released. Lower values will result in more compression than higher values.

Comp

Sets the amount of compression – think of this as a dry/wet crossfade.

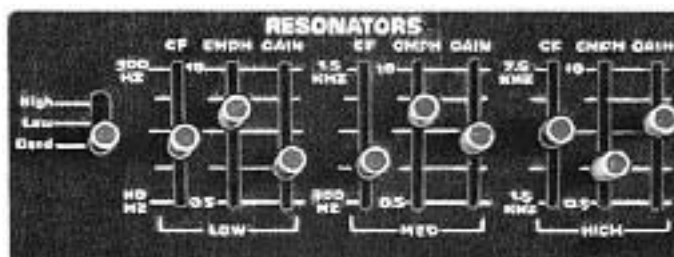
Input

Adjusts the input level before the signal reaches the compressor.

Output

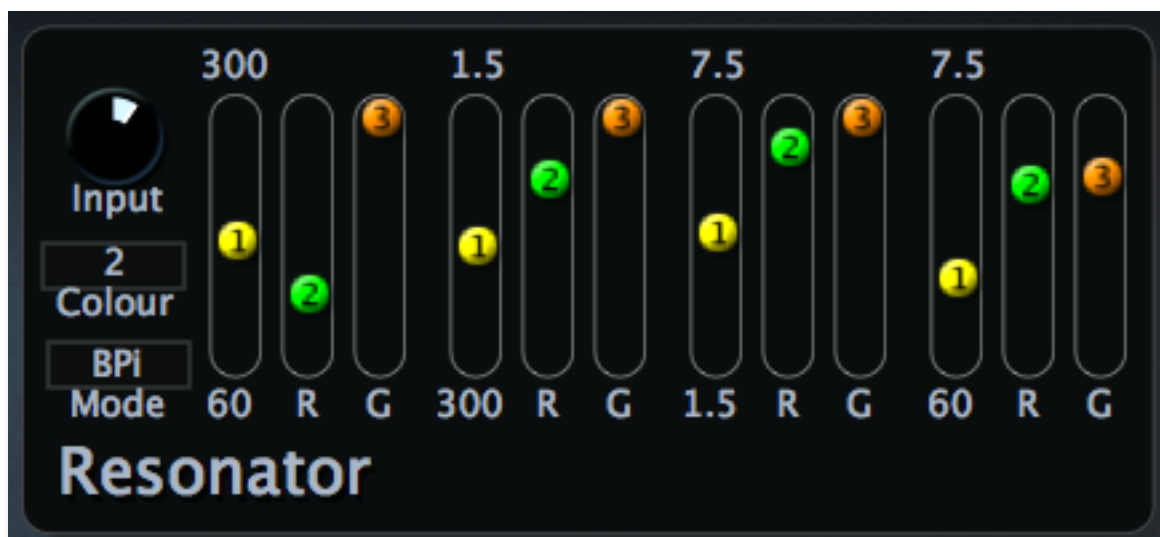
Adjusts the output level to compensate for any loss/gain resulting from compression.

Resonator



One of the very first polyphonic synthesizers ever included a 3-band peaking filter that could be used to dramatically shape the overall sound. [Here](#) is a video example of the original, and [here](#) is information about an interesting hardware “clone”.

The ZebraHZ version is similar, but is completely modulatable and has an extra full-range band. To see the Resonator, click in the effects grid and select the *Res1* module from the very bottom of the list...



- **Input** adjusts the signal level at the resonator's input. Note that ZebraHZ's resonator is strictly monophonic – stereo signals are summed to mono first.
- **Colour** selects one of 3 different analogue filter models in the order of CPU usage.
- **Mode** switches the type of filters used: LP = lowpass, BP = bandpass, BPi = bandpass with the second filter (300Hz to 1.5kHz) inverted, HP = highpass
- **60 to 300** etc.: the yellow sliders determine cutoff frequencies between those ranges. Note that the last filter is full-range i.e. 60Hz to 7.5 kHz.
- **R**: the green sliders adjust the resonance for each filter.
- **G**: sets the output gain of each filter.

Tip: ZebraHZ's resonator is worth mastering. It can even help train your ears to recognize natural formants in the environment or in acoustic musical instruments.

Backstory

The Dark Zebra is the result of a 4-year collaboration between Hollywood film composer Hans Zimmer and synth sound designer Howard Scarr. It all began in 2007 with a surprise e-mail from Hans to **Urs Heckmann**, developer of the Zebra2 modular synthesizer. The initial correspondence went something like this:

Dear Urs

You must have worked so hard to design such a brilliant synth! I have a little favour to ask of you, perhaps you could help. I need a sound programmer for the next Batman movie. We're all much too busy here to get some murky sounds out of Zebra, so if you happen to know somebody with a vivid imagination, someone who doesn't need much sleep... (etc.)

so - many thanks!

Hans Zimmer

Dear Hans

Great to hear from you personally! For Zebra sounds I have the ultimate address: the guy who created our new factory sounds... (etc.)

greetings from Berlin!

Urs ;)

A few months later, Zebra2 sounds for THE DARK KNIGHT were beginning to take shape, but it was tough going. Howard's early attempts were either too jolly or too clever by half, too technical, so the upper echelons at Remote Control Productions decided that it would be best to lock him in the company dungeon with nothing but a daily portion of gruel, a state-of-the-art computer and a supply of candles for company. And a bucket called Bob.

Cut to a very different room. Spacious, sumptuous, like a cross between the bridge of the Nautilus and a Viennese brothel. A clean-shaven Maestro was once again gazing into the monitors, tweaking sounds emanating from his go-to synthesizer into submission. It was slowly starting to gel – he had almost forgotten about that old bloke downstairs...

The days turned to weeks, the weeks turned to more weeks – then it happened. Through an unused cable duct leading directly into a corner of a small programming room came an unpleasantly throbbing drone accompanied by a clanking that eventually morphed into the painful grating of metal upon tortured metal. Partly because the cacophony was disturbing his work, but mostly because it scared him out of his pants, the eager young assistant called the security guards. Howard was located and extracted from the cellar that same afternoon – covered in grime, but grinning from ear to ear.

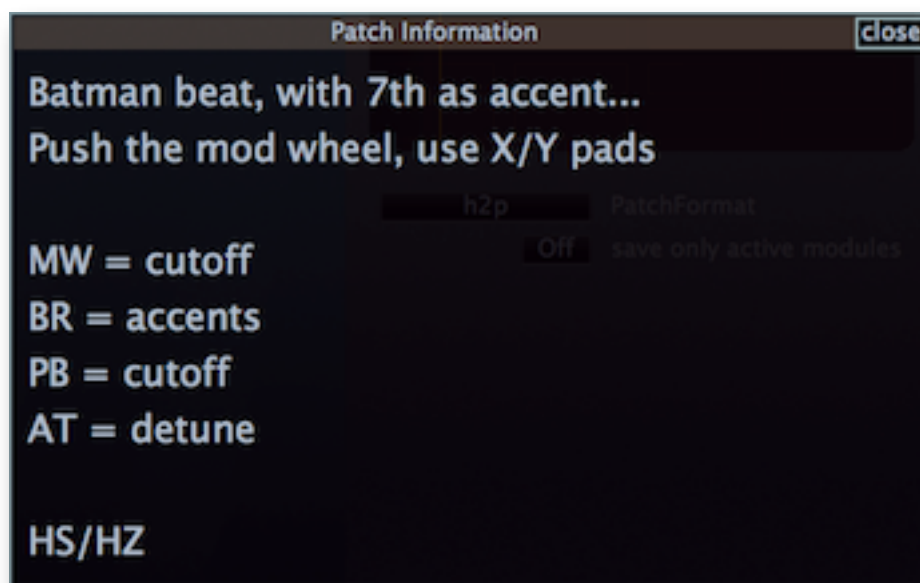
"I did it", he croaked. "I made a usable sound", he claimed. "Say hi to Bob", he urged. The bucket was whisked away at arm's length, Howard donned a pair of Ray Bans, grabbed a quick café latte and shuffled outside for his first cigarette in a month. Life tasted so good.

Thus began a fruitful collaboration that reached its peak in the sound set you now hold in your grubby little hard drive.... Enjoy!

The Dark Zebra Presets

Most of these presets were programmed to be performed **manually**, they make use of appropriate MIDI control data: modulation wheel (MIDI CC#01), pressure, pitchbend and breath controller (MIDI CC#02).

To play these presets with the intended expression, you should read the patch information box for each one. For instance, here's the one about **Batpunk Seq+**:



To open the Patch Information window, click on the **i** symbol in the upper bar.

Please note the following abbreviations:

AT	-	Aftertouch
BR	-	Breath Control (MIDI CC #02)
MW	-	Modulation Wheel (MIDI CC #01)
PB	-	Pitch Bender

Lastly, all preset names that end in a '+' (plus) sign make use of the X/Y pads.

Basses + Drones

Aerodrone
 Analog Schmanalog
 Arise Drone 1+
 Arise Drone 2+
 Bane Bass - rough
 Bane Bass - smooth
 Bane Drone
 Base Metal
 Basic Analog Drone
 Bass Ivorish
 Bass-DIVA+
 Bass-TARD
 Bombers Over Berlin
 Boom Bass
 Deehive
 Deep Limbo Drone
 Deep Pain Drone
 Faith Healer
 Feedback Drone Guitar
 Feedback Soft Metal
 Foundry Bass
 Intro Dive
 Landslide
 Monstrosity
 Octave Bass
 Pulses Drone
 RezDrone - filter
 Ringmod Pulser
 Scramble Bass
 Square Slipper
 Stereo Bass
 Throat Bass+
 Walteration

Bells + Metallurgy

Bell Labs 2+
 Bell Pad+
 BenderZING+
 Breathing Bells with Fizz+
 Chord Metal - thin
 Chord Metal - thinnest
 Foundry Bass
 Gobichord - hard
 Gobichord - soft
 Hong Drum
 Limbo hard
 Ma Bell+
 Metal Spank - bright
 Metal Spank - dark

Metal Spank - slow
 Partial to Bells
 Punching Metal
 RezDrone - cold 1
 RezDrone - cold 2
 Scaffolding
 Scissors
 Swordmaster
 Tonk to Metal
 Tortured Metal - hits
 Tortured Metal - scream
 Zingtar

Drums + Clocks

Alarm Clock
 AutomatiQ+
 B-Begins Comb
 Bane Beat 5-4+
 Bane Shatter
 Bataalimba+
 Batcave HiHat - fast
 Batcave HiHat - slow
 Batflaps Performer
 Batpunk Havana Club
 Big Flamboo
 Big Flapper
 Breathing Bright
 Breathing Cat
 Breathing Dark - fast
 Breathing Dark - slow
 Breathing Slow
 Chicken Shake
 Clock Backward Time - fast
 Clock Backward Time - slow
 Clock Bones+
 Clock Bongito
 Clock Click - binary
 Clock Click - tristate
 Clock Hollow
 Clock Scissors
 Clock Spacebirds
 Crash Cans
 Drum Analog Noise
 Echo Perk
 Field Player+
 Flapbeat fast 5-4 noise
 Flapbeat fast 5-4 pan
 Flapbeat slow 5-4 noise
 Flapbeat slow 5-4 pan
 Gobi Tech percussion
 Gotham Storm

Gotham Ticker
 Gretschen 8th+
 Gretschen 16th+
 Gretschen single+
 Hatbox 5-4
 Hatnoise Wave
 Log to Stick
 Noise Pulse 8th
 Noise Pulse 16th a
 Noise Pulse 16th b
 Noise Pulse 16th c
 Noise Pulse 16th d
 Pageturn - clean
 Pageturn - loop
 Pageturn - tremor
 Phase Train
 Punch Pots - comb
 Punch Pots - noise
 Rattled
 Snapper 3
 Square of the Hippo
 Timber Tomsnare
 Tom Bombers
 Trilobite
 Tungsten Toms+
 Warpatch
 Water Pot

Effects + Chaos

Aleatronic
 Arise Noise
 Arise Tones
 Bane Shout - Basara
 Bane Shout - Deshi
 Bowed Chaos
 Cloven Hoof
 Construction at RCP
 Dark Chaos
 Demon Whispers
 E-Donkey+
 Eerie High Mono
 Electron Chain
 Electron Tank
 Emo Trashing L100
 Falling Noise
 Faze Thunder
 Ghosts
 Hadron Hall 2
 HeliBomber
 Limbo - chaos
 Limbo - slow

Long Swoop
 Low Strangle
 Noise Angels
 Road Accident Kit
 Rumbling
 Splinters
 Suffolkation Tardis
 The Long Now - orbit
 The Long Now - straight
 Tomb End
 Watershed
 Wheel Noise - rumble
 Wheel Noise - simple
 Whispercussion+
 Winged Dwarf
 Winged Giant

HighArps + Chords

5-4 Buzzchord
 7-8 Batcave inspired
 8th Horn Pulse
 Angel Falling - Dm
 Angel Falling - free
 Angel Rising - Dm
 Angel Rising - free
 Batagonia
 Batbeat Holes+
 Batcave crystals
 Batcave glass harmonica
 Batcave MSEG swim1
 Batcave MSEG swim2
 Batcave octaves - analog
 Batcave octaves - mellow
 Batcave overtone shift
 Batcave psirens
 Batcave syncing down
 Batcave-ish pluck
 Batcave-ish scrape
 Berlin Speed
 Bop Talk+
 Bow Bounce Synth 1
 Bow Bounce Synth 2
 Breathing Choir
 Cat Appeal
 Cat Chanel
 Cat Cutter
 Cat Pulse
 Cat Techno 1 - hypersaw
 Cat Techno 2 - busy
 Cat Techno 3 - resins
 Chord Metal - bellish

Chord Metal - flappy
 Chord Metal - harmless
 Chord Metal - mild 1
 Chord Metal - mild 2
 Chord Metal - straight
 Chord Mombassa
 Chord Vitamin B
 Chord Vocal
 Chordination
 Combplayer fast
 Combplayer hard
 Combplayer slow
 Combplayer soft
 Dream Roll
 Fast Rusty Bomber
 Five Against Four - minor
 Five Against Four - neutral
 Flamencomb Dark
 Flamencomb Real
 Gated Atlantic
 Glass Peals and Flaps
 Gobi Banjo - fast
 Gobi Banjo - slow
 Gobi Tech monohard
 Gobi Tech polysoft
 Gobinator
 Hardface
 Hektik 32 bright
 Hektik 32 high
 HiSeq Flute 4-4
 HiSeq Flute 5-4
 HiSeq Hang
 HiSeq Viral 1
 HiSeq Viral 2
 HiSeq Viral 3
 Little Roller
 Mock 15 Arp
 Straight Talk
 Strumflap

Leads + Horns

Aetherial Tron
 Angelis
 Asynth2
 Bane Brass
 Bat Horns
 Benderphone
 Berlin One
 Big Wing Blade
 Blade - high hard
 Blade - high soft

Blade - original raw
 Blade - reverb
 Blade - synced wobble
 Chord Bender Choir
 Chord Bender Saws
 Crazy Diamond poly
 CSBO 4th
 CSBO duelling XMFs
 CSBO effects
 CSBO glide
 CSBO innocent
 CSBO simple
 CSBO swell+
 Distant Sun
 Faze Four Fan Fare
 Flappy MG Mono
 Flappy MG Poly
 Forlorn - full
 Forlorn - pure
 Forlorn - stringy
 Hans Forlorn
 Hornstar
 Instability
 Jazz Tonto+
 Lonely Batcall complex+
 Mock 15
 Ostinato 1_4
 Ostinato Sad
 Phazor
 Pitched Noise poly
 Power Chorder
 Power Leader
 Singing Triangles
 The Giorgio Room
 Triangle Ghost
 Vintager
 Virus Horns

LowArps + Stomps

3rd Plodder
 8th Primitive Stomp HS
 16th Primitive Stomp 1
 16th Primitive Stomp 2
 16th Stomp - chug timps
 16th Stomp - five hills
 Army Base 1
 Army Base 2
 B-Begins aggressive
 B-Begins simple 1
 B-Begins simple 2
 B-Begins simple 3

B-Begins VIRUS clean
 B-Begins VIRUS distort+
 B-Begins VIRUS noise
 B-Begins VIRUS punch
 Bass Propeller
 Bass-DIVA stomp
 Batpunk Seq+
 Batpunk Seq1 - speaker
 Batpunk Seq2 - ricky+
 Batpunk Seq3 - orient+
 Breathing Bass
 Cat Bass Seq+
 Cheops1
 Cheops2
 Chug1 - fast+
 Chug2 - cutter
 Chug3 - large
 Deshi-Basara Beat
 Dr Pump
 Flaps osc
 Flaps ugly
 Ghana Beat+
 Heartbeat Drone
 Hektik 32 low
 MiniPump - 8th
 MiniPump - 16th
 Octave Jump 1
 Octave Jump 2
 Octave Jump 3+
 Octave Jump 4
 Plod Bass
 Precinct 14
 Precinct 15
 Rien de Pulse
 Rolling Metal
 Sync Chord Stomp
 Three Quarters Breathing
 Vitamin B

Cat Pluck
 Choir-ish Pad
 Classic Stringer
 Comb Strings
 Comba Karma
 Elevenotron In
 Elevenotron Out
 Fluttery Strings
 Forgotten Angels 2
 Forlorn - waver
 Harp
 Liquid Rust
 Lonely with Windchimes
 Minor Raise
 Nepalese Temple+Flutes
 Nepalese Temple+Railway
 Newmantics
 Nightshore
 Organigram
 Pad 59
 Percalliope
 RezDrone - vocal
 Rusty Harp
 Sad Pad
 Sad Strings
 Saengerbuben
 Strings and Horn Split
 Supersquare Poly
 Violin Fluff
 Waterpiano
 Ztrings 1
 Ztrings 2
 Ztrings 3
 Ztrings 4
 Ztrings 5

Pads + Keys

Aetherium+
 Alternator Flute
 An Enoding
 Analog Piano
 Atlantic Swell
 Bathwater Harp+
 Beano
 Bling+
 Blue Glass
 Bouncer
 Box of Tron

Xtras

Atomic Ruster
Bendybass
Canned Flutes
Comedy Lab
Flagship Brass+Strings
Howard Square
Kraft
Marcato Chunks
Maximini
Minibass 1
Motor 49
Oscar Harpsi
Rasp Room
Resonator Learner
Scrapie
Sharpsichord
Shepard Template
Snapper 1
Snapper 2
To Boldly Go
Underwater Pianette
Voyage 59
Wet Potz



The End