

Avatar ST Pro Manual V.1.1



Avatar ST is featuring a new generation of HG Fortune synths. Basically it is most suited for a large variety of pads, soundscapes, atmospheres or related FX sounds but can do other sounds like certain kinds of basses too. The 16 Step Modulator allows sounds to be fairly rhythmicated in various ways if wanted. Also you can have one section stepmodulated while the other is not as there are two complete sections with oscillators, modifiers, VCA EG, Delay, Pan and Reverb send, plus a grain processor and a filter to be inserted via different audio routings. In addition there are a lot of modulation options you might select from in order to tailor your sound. Twelve Tutorial patches have been created in order to help you exploring this synth - see also Appendix 4.

Main features (based on Pro version):

- 2 x 2 PCM wave oscillators with 384 waves in 3 banks
- 2 x Osc Mix section with one XY-Pad plus mix option for direct and step modulated out
- 2 x Mystify with three selctable types (Brite, Soft, Dark)
- 1 x Grain Processor
- 1 x Filter with 4 types (LP, HP, BP and Feedback) incl. 1 ADSR EG
- 2 x VCA EG (ADSR)
- 2 x Delay, 2 x Pan
- 7 x LFO, 1 x S&H, 16 Step Modulator, Keytrack and Modwheel
- 1 semi parametric 3Band Stereo EQ, 1 small Reverb for adding some nice flavour
- 16 voices, 8 Lazy Buttons

Major differences between Basic Free and Pro version:

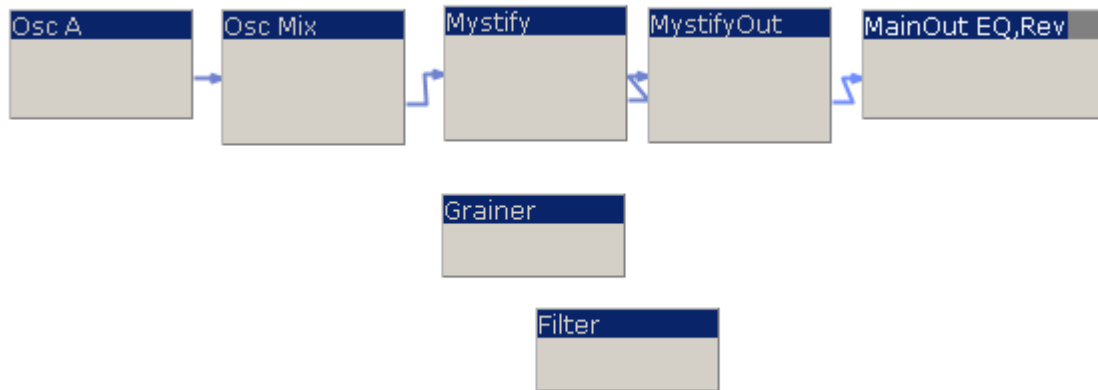
Pro Version = 16 voices, 128 internal patches, 384 internal waves (3 banks),

Basic Free = 4 voices, 64 internal patches, 256 internal waves (bank #0 & #2), SF2 & wave loading only with Osc B2, no internal patch select and management (load/save) – only via Host.

N.B. 128 waves (internal bank #2) have been kindly contributed by www.westgatesounds.net

Some basic considerations in order to help you understand this synthesizer. Well, it does look fairly impressive and it is, but having a look at the building blocks aka sections it becomes a lot more simple.

The image depicts the basic sections thus providing a good overview:



The top row with two oscillators, oscillator mix, Mystifier, Mystify out (VCA EG, Pan, Delay) is present twice thus think of it as a 2 x 2 oscillator synth.

In addition there are a Grain processor aka Grainer and a Filter which can be routed or inserted into the audio path in various ways thus widely extending the overall flexibility and sonic possibilities for creating great sounds.

Then there is Main Out with Reverb, 3Band EQ and Main Volume.

You see up to now it does not look so much to cope with.

For further detailed soundshaping there is a variety of modulation sources like seven LFO, Sample & Hold aka S&H, 16 Step Modulator, a free ADSR EG, plus Keytrack and Modwheel. And there are quite a lot of options to utilize these sources. All in all here it is where it is going to be really complex. Thus it is a good idea to use these sources deliberately and not to overuse the variety. Depending on the sound you are going to create some destinations may and even should share the same source maybe even in inverted mode.

Here is a list of audio routing options:

Osc A to Mystify A, Grainer, Filter, Mystify B

Osc B to Mystify B, Grainer, Filter, Mystify A

Grainer to Mystify A, Mystify B, Filter

Filter to Mystify A, Mystify B, Direct VCA A, Direct VCA B

The Oscillator and Oscillator Mix section



As sonic heart serve 2 x 2 pcm wave oscillators (using sf2 files or loadable wave files at section B). Each oscillator has options for semitone settings (0 to +11), octave (-2 to +2)

The main control for the oscillator mix is handled via the X/Y Pad with Osc A1 and A2 assigned to Y axis, resp. B1 and B2 assigned to X Axis. Via Manual setting you can use the Joyball to mix the oscs. Also the Mod X / Y knobs can serve the same purpose. Selecting another one of the modsource you can have continuous motion in mix or even a key attack related mix. At this section there are mute buttons for each oscillator's instant muting.

A very special mode for X/Y is the Rotation Mode where mix is done in a circle driven by a dedicated LFO in the LFO section called RotLFO. Additionally you can even modulate the speed of Rotation by a selectable source thus rotation will speed up and down. This kind of 'tumbling' (or 'egging' as in German = 'eiern') adds some nice variation.

The blue bars next to the XY Pad allow to set ranges for the modulation in effect. Thus you might limit the modulation to the upper left or lower down corner.

Finally the output signal can be mixed between normal = Dir(ect) signal and stepped = step modulated signal with selectable mod source.

Next each section's output (A or B) can be routed (send) to one of the Mystifiers, the grain processor or the Filter.

The Mystifiers

Both Mystifiers are virtually the same and have been derived from the former Spooks and now featuring three different types: Brite, Soft and Dark. Though the Mystifiers can give some good flangerlike sounds their major task is to change the sound characteristic from metal like to shining blips and even dark scapes depending on the modulations being used from manual to fairly slow settings or fairly fast settings for resonant blips. Also you might try using EG for creating a metallic sounding attack.



Each Mystifier has got it's dedicated LFO for Myst Amount but there is a variety of other sources to select from even like Keytrack + or – and Modwheel. The Myst Offset knob allows to shift the Modulation within a certain range so to exclude certain areas. Below is the selector for the Myst Type: Brite, Soft and Dark. Next is the Resonance knob with a Range selector below with Fine having the full knob range for the most relevant resonant part. High Cut simply serves to eliminate some unwanted harsh or too high ringing. Finally there is the Mix knob for mixing between direct and FX signal plus optional modulation.

The output section of each Mystifier:



Here is an ADSR VCA envelope generator (EG) to shape the volume while the level knob adjusts the level of the Mystifier's signal.

Next is the Feedback knob for the Delay with a selector below to choose a bpm related setting. Delay Level sets the amount of delay signal and there is a selector below to switch delay to off or on.

Pan knob is quite obvious but there is a selector below to have the delayed signal moved to opposite direction of the undelayed signal (inv Dly). Finally Rev Send determines the amount to go to the inbuilt reverb.

Note: Please have an eye on the Myst level knobs in order not to have mute one section accidentally ;-)

Related to the Delay of both Mystifiers is the Delay Offset knob and selector (below the reverb settings).



Here you can manually offset the Delay to half of the given bpm related setting. The selector below allows to choose among Normal, dotted or triplet delay and further more there are some more modulations available even by the Step Modulator which can give some nice rhythmed fx sound.

The Filter section



There are four types of different filters selectable: LowPass, HighPass, BandPass and Feedback. Cutoff and Resonance knobs are quite obvious but modulation is a bit tricky as the Mod Cut knob can mix between a selected modsource Src2 and the Filter ADSR EG plus this mix can be modulated by a different source (SrcModMix). Thus these few elements offer a lot variation.

Finally there is the knob for mixing the unfiltered to the filtered signal and below is the selector where the signal is going to be send to: Myst A, Myst B, or direct to VCA A or VCA B offering the option just like a normal synth.

The Grain Processor aka Grainer

A single-stream quasi-synchronous granulator buffering input audio and releases it in discrete grains of a specified duration (size), at a specified rate. Random variation can be applied to the grain length and grain rate, and they can be modulated by an external source.



This granular processing is used like an fx but with all the option this module does offer. The Grain Size is ranging from the typical 20 to 50 msec. Grain Rate is the interval between the start of one grain and the start of the next grain in the stream. As rate should be set at least as long as the Grain Size Grain Rate starts at current Size setting adds up to 60 msec then. Thus Size determines as ofset the lower limit of Rate.

Pitch can be shifted for approx. +/- 1 octave and can be modulated by a selectable source. Pitch Var adds some random variation to Pitch also with selectable modulation.

Size Var gives a random variation to Grain Size while Rate Var adds random variation to Grain Rate.

Envelope Type is used to shape the grain's amplitude envelope with different characteristics: Sine, Gaussian, quasi-Gaussian, Rectified Sine, Triangle, or Trapezoid

Grain Processing may give some great sounding and in combination with the Mystifiers even sounds like the waves I did from bitmap / image pocessing to waves for the Alien Space Weaver VSTi.

Output can be routed (send) to Mystify A, B or Filter.

Mod Sources

There are 7 LFO, ADSR EG 4, one Sample & Hold and a 16 Step Modulator plus keytracking and Modwheel can be used to and have some selectable assignments.



LFO 1, LFO 2, LFO3 and LFO 4 have a quite common set of waves like Sine, Triangle, Saw and Ramp while LFO 5 has 9 more complex waveforms and tempo with the latter two is not related to bpm settings as with the others. LFO MF is solely routed as selectable option to SrcModMix of Filter while Rot LFO is a special LFO for Oscillator Rotation Mix.

Sample & Hold provides a random modulation signal like pulses at varying levels in different types like Up, Down, Up&Down, and the Variation knobs allows to vary the 'patterns' of S&H to a certain extend.

ADSR EG 4 can be used like a free EG at different destinations.

16 Step Modulator



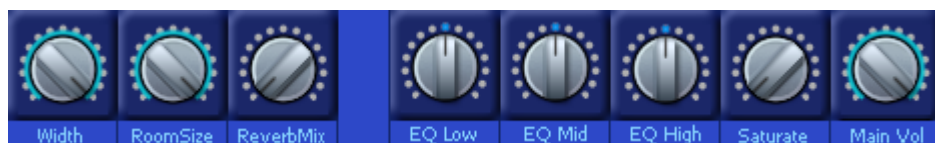
This is quite a powerful modulation source in fact this synth started with this one being used on the signal of the four oscillators for a fairly rhythmic (stepped) audio signal. Of course it is really useful for other modulations too ;-)

There are four knobs: GateLen with Ramp Up and Down related to that knob in order to smooth the Gate Attack and Release. Shuffle is obvious.

Quite important is the Divider selector right to the Manual advance button as this is the divider to the current host clock and setting the actual tempo of the Step Modulator. Jump allows to skip certain steps thus with setting of 3 every third step is played. Step# determines the number of steps to be used. Mode can be Forward, Backward or Random. Auto Var is helpful to have some more variation to the pattern played and does offer three different modes. Above the Reset button there is the Pause button to stop this unit at the current step.

There are 16 sliders to set a pattern for modulation.

The final Output section



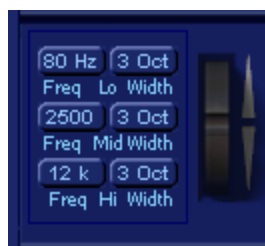
There is a small reverb with adjustable Width and Room/Size plus a Reverb Mix knob. Though this is not a high end reverb it does add a nice flavour to the sound.

The 3Band Stereo EQ is semiparametric as via a dedicated button you can popup additional settings for center frequency and bandwidth (on octaves) for each band.

Saturate knob adds some saturation while Main Volume sets the overall output level.

Setting Parameters for the 3Band EQ

To edit the params of the EQ select Edit EQ Par at the lower right button group and the resp menu will appear left of the wheels.



Further features

To activate Velocity and select a mode press Edit Vel at the lower right button group and the resp menu will appear left of the wheels.



Velocity does work on the level of the oscillators with the option to invert sec A or B so you can crossfade via velocity.

Also you may choose a voice allocation mode:

Normal - Each new note is allocated a fresh unused voice. Envelopes always start from zero.

The older voice is faded-out to prevent the old note's release tail from sounding 'under' the new note.

Overlap (in most cases to be preferred) - Same as above. Except the older voice continues to sound along with the new one. Useful for ensemble sounds like string sections where several instruments can play the same note.

Setting Keytrack range:

Press Edit KTrack at the lower right button group and a range slider will appear above the onscreen keyboard for easy setting the range of keytracking. This maybe really handy if you are using a MIDI kb with only 2 or 4 octaves but want to use the full range of keytracking.



Basically keytracking is valid for a 5 octave keyboard at full range and will be using min or max value beyond that range.

Lazy Buttons



Eight Lazy buttons can supply endless switching to new patches and you only need to save the ones being useful for you ;-). Anyway this Lazy feature will give you some more ideas for editing your own patches.

Hint: Using long release settings will increase CPU-usage - remedy: lower release at filter ADSR, lower release at ADSR in master section and raise delay MixLvl instead. So in most cases a release just below half way up of the slider will be sufficient to get a fading on the sound.

Hint: Switching between patches might lead to some sound artefacts by Delay when done while sound is still playing. In order to have a clean switching the sound of current patch should have faded to zero level before switching to next patch. Or, have delays set at the same Delay parameter value.

As of the internal patch name display (popup selector in Pro version) you may experience most hosts may truncate the names down to about 23 chars. Here is where the internal patch management (load/save insts=fxp and banks=fxb) of the Pro version comes in handy as this does not have such a restriction.



Credits and further info

The Synthesizer has been created by H. G. Fortune with Synthedit by Jeff McClintock.

Patches were kindly done by **Dimitri Schkoda (DS or no sign)**, **Lloyd McKay (lk)**, **Marko Hautamäki (G)**, **Bob ODonnell (BM)**, **Heinrich of Sanguinea Project (SP)** and **Daniel of www.westgatesounds.net (dk)**

This VSTi uses further modules by David Haupt, Kelly D. Lynch, Peter Schoffhauzer, Daz Diamond, Lance Putnam, Etric van Mayer, Ungkargerth et al.

VSTi by H. G. Fortune:

More VSTi: <http://www.hgf-synthesizer.de>

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official support forum on kvr: <http://www.kvraudio.com/forum/viewforum.php?f=149>

Open group for users, fans, friends and supporters: [on www.facebook.com](http://www.facebook.com)

This is not a technical support forum rather than for latest news, communication among members e.g. sharing ideas, videos and music.

Thanks to all who have helped and do support my work!

Appendix 1

List of 128 waveforms in bank #0

000 [Cpl]AiryVoices	032 [Syn]Claviculi	064 [Syn]Twinky 4	096 [XFx]BellMaze
001 [Cpl]Ayesha	033 [Syn]Digitalis	065 [Syn]WarmAnalog	097 [xFx]Chicadas
002 [Cpl]Bubbly	034 [Syn]DistSync	066 [Str]BigOrchStr	098 [xFx]Clocks-rev
003 [Cpl]Cassiopeia	035 [Syn]DuoWave	067 [Str]Ensemblon	099 [XFx]DeepAbyss
004 [Cpl]Chordalica	036 [Syn]DXing	068 [Str]RealViolins	100 [XFx]Distorter
005 [Cpl]Claviger	037 [Syn]Fatt	069 [Str]Stringelized	101 [xFx]FantaB-rev
006 [Cpl]DigiString	038 [Syn]FogHorn	070 [Str]Superstr	102 [xFx]Flashy
007 [Cpl]Enigmatic	039 [Syn]GoodLow	071 [Str]SynStrinx	103 [xFx]FLX-PStorm
008 [Cpl]FemBreath	040 [Syn]Growly	072 [Orc]AsiaBlown	104 [xFx]FX-Rattler
009 [Cpl]FLXAtkPad	041 [Syn]HollowSaw	073 [Orc]AsianMetal	105 [xFx]GlissHarp
010 [Cpl]FLX-Strgbrite	042 [Syn]HvySyncFZ	074 [Orc]Blasomatrix	106 [xFx]Haunted-rev
011 [Cpl]GhostBreath	043 [Syn]KS-FatBras	075 [Orc]EthnicVoc	107 [xFx]InsideTube
012 [Cpl]GlassBlojob	044 [Syn]LowXsaw	076 [Orc]Fanfare	108 [xFx]InvWarpoon
013 [Cpl]GlassyZone	045 [Syn]MedSyncFZ	077 [Orc]FrankHorn2	109 [XFx]Labyrinth4
014 [Cpl]Guevercin	046 [Syn]ModChord	078 [Orc]Shaku	110 [xFx]LostInSpace
015 [Cpl]HeavenlyOhh	047 [Syn]Nasalic	079 [Org]FarFeesa	111 [xFx]MovinBell
016 [Cpl]HyperVox	048 [Syn]OmniSaw	080 [Org]Ham'n'Egg	112 [XFx]NoiseFume
017 [Cpl]MetAtkF	049 [Syn]OscarSync	081 [Org]HeavyOrglIb	113 [xFx]NoiseOne
018 [Cpl]Mirkheim	050 [Syn]PS6-FatSaw	082 [Org]Organic	114 [XFx]NoizMetal2
019 [Cpl]MultiMorph	051 [Syn]Purity	083 [Org]OrgueStr	115 [XFx]NoizWatery
020 [Cpl]PepeGoes	052 [Syn]ResoAttack	084 [Org]SmokeH2O	116 [XFx]RainCrackle
021 [Cpl]Shena-org	053 [Syn]Roaring60s	085 [OrV]Aaahthificial	117 [xFx]ResoBubble
022 [Cpl]SparkleStr	054 [Syn]Saws1	086 [OrV]AirVoice	118 [xFx]SamUnhold
023 [Cpl]Sweepy	055 [Syn]SawsOff	087 [OrV]Aspiration	119 [xFx]SeaSide
024 [Cpl]VocNoVox	056 [Syn]SawsWet	088 [OrV]FatQuyer	120 [XFx]S'n'H-Blipps
025 [Cpl]VoxPlus	057 [Syn]Saxorguitar	089 [OrV]Kwaier	121 [XFx]SpaceAbyss
026 [Syn]AfricanSaw	058 [Syn]ShredSync	090 [OrV]LongOoouh	122 [xFx]Spookie!
027 [Syn]BariSync	059 [Syn]Simplify	091 [OrV]NoVocal	123 [xFx]StormWind
028 [Syn]BellPadBreath	060 [Syn]SlowPluck	092 [OrV]SadFemale	124 [xFx]Tunnellizer
029 [Syn]BigClassic	061 [Syn]SoftDigiBell	093 [OrV]Voxodont	125 [xFx]Vacuumizer
030 [Syn]BlueSync	062 [Syn]SquawSaw	094 [xFx]AlienPlanet	126 [xFx]VX-Storm
031 [Syn]Chord	063 [Syn]StringSect	095 [XFx]Aliens-r	127 [XFx]Woodland

List of 128 waveforms in bank #1(Only in Pro Version)

000 [Cpl]AtkWonder	032 [Syn]Clavikhan	064 [Syn]Voices	096 [XFx]CaveMaze
001 [Cpl]BigFantasy	033 [Syn]DigWaveX	065 [Syn]XPulsed	097 [xFx]ChordedNze
002 [Cpl]Caducifer	034 [Syn]Drawbar	066 [Str]Bowed	098 [XFx]DarkRealms
003 [Cpl]ChoirSparkle	035 [Syn]DXEP-Base	067 [Str]MegaStrngs	099 [XFx]Demons-r
004 [Cpl]Cinematic	036 [Syn]FatSaw	068 [Str]StarStrngs	100 [XFx]Encoder
005 [Cpl]DeepSpaceX	037 [Syn]FattyStr	069 [Str]StringsPad	101 [xFx]FarOut
006 [Cpl]EerieVox	038 [Syn]FuzzDigi Z	070 [Str]Symphony	102 [XFx]Florida
007 [Cpl]Exotica	039 [Syn]GoomSV	071 [Str]WideStrngs	103 [xFx]FXGameNoiz
008 [Cpl]FLX-Aaahh	040 [Syn]HiPassed	072 [Orc]Asianic	104 [XFx]Ghoulzone
009 [Cpl]FLX-SpkIStr	041 [Syn]HvyBrite	073 [Orc]BestAttack	105 [XFx]HadesLoop
010 [Cpl]FullPad	042 [Syn]HybridBras	074 [Orc]BroadBras	106 [xFx]HeavyStrok
011 [Cpl]GhostChoir	043 [Syn]LiteSync	075 [Orc]ExotAtck	107 [XFx]InTension
012 [Cpl]GlassFlute	044 [Syn]MedFat1	076 [Orc]Frankenhorn	108 [xFx]JetNse
013 [Cpl]Grumblng	045 [Syn]Metallic	077 [Orc]SadFlute	109 [xFx]LightningL
014 [Cpl]Haunted	046 [Syn]Narronics	078 [Orc]TubularWv	110 [XFx]Monkish
015 [Cpl]Helionis	047 [Syn]Nopia	079 [Org]Gorgue	111 [xFx]NoiseBug
016 [Cpl]Margalit	048 [Syn]OpenJaws	080 [Org]HeavyOrgl	112 [xFx]NoiseLoop
017 [Cpl]MircalePad	049 [Syn]ProphetSaws	081 [Org]OrganaVox	113 [XFx]NoizMetal1
018 [Cpl]Morphomat	050 [Syn]PSynHit	082 [Org]Organox	114 [XFx]NoizTube
019 [Cpl]Narcissus	051 [Syn]PWM-6T	083 [Org]SacredOrg	115 [XFx]RadioBad
020 [Cpl]PPGishPad	052 [Syn]RhodesIsle	084 [Org]SpaceOrgan	116 [xFx]Realms
021 [Cpl]SoftAtkPad	053 [Syn]Rodikhan	085 [OrV]AaaOhhhs	117 [xFx]RisingHigh
022 [Cpl]Sparkling	054 [Syn]Saws2	086 [OrV]ArtVox	118 [XFx]Scrapyard
023 [Cpl]UltraFloat	055 [Syn]SawsSoftwide	087 [OrV]BreathVox	119 [xFx]ShipLiftOff
024 [Cpl]VoxObscura	056 [Syn]SawyPulse	088 [OrV]Huuuouh	120 [XFx]SomeWind
025 [Cpl]WideDigi	057 [Syn]Sharpening	089 [OrV]LongAhhhh	121 [xFx]SpcWarpX
026 [Syn]AtkOpnBrass	058 [Syn]SimpleSine	090 [OrV]Monks(Lo)	122 [XFx]StepFlow
027 [Syn]Bassical	059 [Syn]SloBrass	091 [OrV]OohWaves2	123 [XFx]Suspense
028 [Syn]BigBrass	060 [Syn]Slurper	092 [OrV]SynVox 1	124 [xFx]UnNatural
029 [Syn]BigSaw	061 [Syn]SpitBras	093 [OrV]Voxy1	125 [XFx]VoxOfNoise
030 [Syn]BriteFive	062 [Syn]Strings	094 [xFx]AlienSpectr	126 [xFx]WaterStream
031 [Syn]Cidaria	063 [Syn]Stringz	095 [XFx]BellCave	127 [xFx]Z-Bubbles

List of 128 waveforms in bank #2

(These are excerpts from sample libraries by Westgatesounds.net to give you some idea about those)

000 Abandoned Funeral H	032 Night in the Cataco	064 Dread	096 Passing Emptiness
001 Abandoned Temple	033 Night Vision	065 Dreaming Choir	097 Phantasms
002 Abandoned Warehouse	034 Nocturnal Ambience	066 Dreaming Wilderness	098 Scattering Shadows
003 Alien Soil	035 Poseidons Realm	067 Drifting	099 Serpents of Mist
004 Arkham House	036 Realm of Shadows	068 Drifting in Wastela	100 Shadow Heart
005 Being Followed	037 Remnants of a City	069 Empty Crypts	101 Shadows Passing
006 Bodies	038 Shadows of Twilight	070 Endless Streets	102 Shining Darkness
007 Burial Call	039 Spectres	071 Entropy	103 Shores of Emptiness
008 Crossed Signals	040 Spectres Chime	072 Enveloped in Shadow	104 Souls in Limbo
009 Darkened Memory	041 Spirit Voices	073 Evening Bells	105 Souls in Transition
010 Debris	042 Spirits Underground	074 Fading Skies	106 Spectres B
011 Deserted Temple	043 Temple Bells	075 Floating in Wastela	107 Stray Whispers
012 Distant shores	044 The Gates of Limbo	076 Floating Shadows	108 Sunless Streets
013 Downed Lines	045 The Midnight Sun	077 Flotsam and Jetsam	109 Sunrise in Space
014 Dreams of Metal	046 The Old Ones	078 Haunted	110 The Cusp of Evening
015 Dreams of Space	047 The Patient Dark	079 Headstones	111 The Piping Dark
016 Evening in Wastelan	048 The Restless Dead	080 Heart of a Dead City	112 They Wait
017 Eyes in the Mist	049 Wasteland	081 Hovering Shade	113 Transforming Shadow
018 Fading Lights	050 After Dark	082 Machines in Space	114 Twilight
019 Floating Debris	051 Automaton	083 Midnight B	115 Twilight Falls
020 Free Energy	052 Being Stalked	084 Moonlight Processio	116 Visions of Death
021 Ghost Energy	053 Black Spaces	085 Mortality Flickers	117 Voices from Beyond
022 Ghost in the Machin	054 Breathing Shadow	086 Mortuary	118 Waiting for Souls
023 Ghost Town	055 Church of Shadow	087 Mournful	119 Wandering Darkness
024 Ghosts on the Tides	056 City of Shadow	088 Night Ambience	120 Wasteland Ambience
025 Growing Shadows	057 Cloaked in Fear	089 Night Noises	121 Wasteland by Night
026 Haunted by the Past	058 Cycles in Space	090 Nightlife	122 Wasteland Calling
027 In the Night	059 Dark Enigma	091 Nocturne	123 Wasteland Mystery
028 It Came from the Se	060 Dark Futures	092 Noises in the Dark	124 Whispering Darkness
029 Life in the Fog	061 Darkened Cemetery	093 Out After Dark	125 Wilderness at Night
030 Living Shadows	062 Decaying Dreams	094 Out in the Night	126 World of Lights
031 Midnight	063 Deserted Street	095 Overcoming Inertia	127 Xithurn

About these sounds: A lot of the sounds were created by mangling beats in a variety of ways -time stretching, pitch shifting and many, many FX chains..... With most soundsets I started by making simple seed sounds. Once I had enough, these were then combined in several different VSTi's as presets which were then sampled, sometimes with even more FX chains. These would then be looped and serve as the sources for the soundset.

The first 50 wavs in Bank 2 are from the newly released SOA Set 1 - Permutations of Shadows soundset from Westgatesounds.net. The remaining wavs are taken from the Anomaly soundset also available from Westgatesounds.net.

Appendix 2

MIDI-Implementation of MIDI CC for buttons, sliders & knobs (recognized data valid from 0-127)

MIDI CC from 33 to 63 are not assigned so you might use these for your own assignments provided your MIDI Controller Hard/Software does support these as normal controllers.

Main Vol	= 7		= 33	Myst A		EG 4	
Myst A Lvl	= 8		= 34	Mod Amnt	= 70	A	= 92
Pan A	= 9		= 35	Offset	= 71	D	= 93
Pan B	= 10		= 36	Resonance	= 72	S	= 94
Myst B Lvl	= 11		= 37	High Cut	= 73	R	= 95
Dly Fdbk A	= 12		= 38	Mix	= 74		
Dly Fdbk B	= 13		= 39	Myst B		Grainer	
Dly Lvl A	= 14		= 40	Mod Amnt	= 75	Size	= 102
Dly Lvl B	= 15		= 41	Offset	= 76	Rate	= 103
Rev Send A	= 16		= 42	Resonance	= 77	Pitch	= 104
Rev Send B	= 17		= 43	High Cut	= 78	Pitch Var	= 105
Rev Width	= 18		= 44	Mix	= 79	Size Var	= 106
Rev Room	= 19		= 45			Rate Var	= 107
Rev Mix	= 20		= 46	Myst A EG		High Cut	= 108
EQ Lo	= 21		= 47	A	= 80		
EQ Mid	= 22		= 48	D	= 81	Filter	
EQ High	= 23		= 49	S:	= 82	Cutoff	= 109
Saturate	= 24		= 50	R	= 83	Resonance	= 110
			= 51	Myst B EG		Mod Cut	= 111
Oscillators			= 52	A	= 84	Mix Dir:Filt	= 112
Wav Sel A1	= 25		= 53	D	= 85		
Wav Sel A2	= 26		= 54	S	= 86		
Wav Sel B1	= 27		= 55	R	= 87	Shuffle	= 113
Wav Sel B2	= 28		= 56	Filter EG		GateLen	= 114
Mod Y	= 29		= 57	A	= 88	Ramp Up	= 115
Mix A Dir:Stepd	= 30		= 58	D	= 89	Ramp Dn	= 116
Mod X	= 31		= 59	S	= 90		
Mix B Dir:Stepd	= 32		= 60	R	= 91	Dly Offset	= 117
			= 61				= 118
			= 62				= 119
			= 63				

You might use MIDI Learn or Edit via right click with mouse on the resp. Item (knob, button, selector etc.) to change these assignments.

Appendix 3

Notes on Loading wave files

It is possible to load wavefiles into Osc B1 and B2 (loops supported) serving as oscillators/soundsources with up to 24 Bit waves supported.

To load a wave file first click on the Mode button then click on icon for the file selector. Anyway this feature is useful for testing wavefiles within the VSTi so you can do a quite easy selection of waves to be gathered into an SF2 file later as it is more convenient to switch between different waves rather than loading a wave from somewhere on your harddisk. Also this setting is stored and restored when loading that SF2 on next startup again.

HINT: When storing a patch the location of the wavefiles loaded is stored as well in order to reload these when switching to that preset. So You should keep in mind that deleting wavefiles used within presets will lead to an error-message! **Due to this it is more advisable to use single patches stored as .fxp rather than complete banks stored as .fxb.** Worst case might be when loading a complete bankfile (.fxb) with stored information of files now deleted will lead to a whole bunch of error-messages. Now You know about it so it is up to You to take care in advance. In general SF2 files are a better solution in handling a whole bunch of samples.

The wave file playing capability is obviously not made to play drumloops, basslines or melodic loops used typically by programs like Magix Music Maker (tm).

Appendix 4

Learning by doing:

Notes & hints on the Tutorial patches in order to help you exploring Avatar ST Synthesizer:

Pure Osc Waves - move X/Y - this is to make familiar with mixing the oscillator waves. Then you might try using some mod sources and amount knobs.

Waves B Stepped - this one is to show section A normal and section B with stepmodulated audio – try some different setting with the step modulator options.

Waves B Stepped - Dly Step mod - this is really unusual but it gives quite stunning results – step modulation on Delay Offset – not to be overused though ;-)

Waves B Stepped - Dly normal Offset - here is with normal delay offset - move the knob, change source.

Waves A Mystify A - move knobs (slowly: Amount, Offset, Resonance & Mix) then change Type, and waves get a feeling how sound can be changed this way.

Waves A Grain Mystify A - move knobs slowly to make familiar with the changes in sound; try then with different waves and Mystify types (Brite, Soft and Dark). With some waves (with rich harmonics) type Brite may be a bit strong then try Soft. Dark won't show much noticeable Resonance but it is good to give some low sounds quite a dark character.

Waves A Filter (MixMod) VCA A - this is fairly simple showing waves A being routed to Filter and then to VCA EG Section A, quite like what a conventional synth will do – also try changing filter type

Waves A Grainer FilterMyst A - one line with Grainer and Filter before the Mystifier – move knobs slowly to get a feeling for changes in sound.

Waves A MixMod Grainer Filter Myst A - same as above but with mix modulation on oscs. A – also try changing waves.

Pure Osc Waves - Rotation - This is oscillator Rotation with Sine in a circle, using one Amount knob you can turn it into an elliptical shape (vertical or horizontal); having amount knobs to opposite direction changes direction of rotation; while adding a mod source parts of the rotation will speed up and slowed down.

Waves A Mystify A - Inv KeyTrack - inverted keytrack is controlling the amount of Mystify A – change Offset and Amount.

Waves A Mystify A - S n H Out mix Mod - S&H controls amount while an LFO is mixing between direct and mystified signal.

These patches can be found a patch # 53 to #64.

Q & A:

Q: Why are there only 64 internal patches with the basic free version?

A: Although there had been about 350 patches to select from most patches made use of bank 1 too, and as this bank is with the Pro version only the possible selection of suitable patches for the free version went down to about 70 only.

Q. Why are the sf2 files stored internally ?

A: Because I'm fed up with having these found as illegal downloads on certain sites :-)

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