DUAL ENGINES
Each one can host an
analogue or wavetable synth

2D/3D VIEW
See the whole
wavetable or just
the current one

**SOUND
DESIGN TIPS**
Illustrate optimal
parameter ranges

FX
Three busses of
three effects each
lurk behind this tab

SEQUENCER/ARP
Move your sounds
with polyrhythms
and randomisation

MORPH
Activate to
interpolate the
table between
waveforms

UNISON
Detune up to
eight voices or
snap them
to chords

**MOD
OVERVIEW**
Select a source
to assign it to
as many knobs
as you like

**FILTER
ROUTING**
Mix continuously
between serial
and parallel
filter routing

DUAL FILTERS
Eight diverse
filter types
and a wealth
of modes

MACROS
The four Macro
knobs also
appear in the
preset browser

MODULATORS
Switch between mod source
editors in this section

Arturia
Pigments €199 PC MAC

It's hard to believe, but this is the first softsynth that classic emulation
specialists Arturia have designed from scratch. No pressure, then...

> Known first and foremost for their dazzling
and extensive V range of classic synthesiser
emulations, Grenoble-based developers Arturia
have never actually built a software synthesiser
'of their own', as it were – until now. With the all-
original Pigments (VST/AU/AAX/standalone), the
immensely experienced industry heavyweights
are laying down what they consider to be the
new benchmark in modern softsynth design.

A dual-engine, dual-filter instrument with
plentiful effects and a built-in sequencer, on
paper Pigments doesn't appear to offer
anything categorically 'new'. As is so often the
case, though, the devil is in the details, which, in
this case, are all about wavetables, workflow and
a truly spectacular modulation system.

Hue and cry
As befits the name, Pigments' resizable (50-
200%) GUI is eye-catchingly colourful, and full
of informative animation, from the oscillator

waveforms and filters to the colour-coded
envelopes, LFOs and other modulation sources.
More importantly, though, the layout is logical
and intuitive, with the top section tabbing
between Synth, FX and Sequencer pages, the
bottom housing Keyboard and modulator
controls, and the Modulation Overview strip in
the middle used for assigning and viewing

> "The 'sound design
tips' feature enables
optimal ranges to be
visually suggested for
specific parameters"

modulation signals. Experienced users will have
no trouble finding their way around, and novices
can get their bearings with two built-in tutorials.

The user-friendliness continues with the
tagged and searchable preset browser, which
shows the oscillator waveforms and filter
shapes, and a brief description of each patch,
and gives access to the four Macro knobs, for
basic noodling without exiting back to the main
interface. And Arturia's new 'sound design tips'
feature enables optimal ranges to be visually
suggested for specific parameters by adjusting
yellow collars around their knobs. Every factory
preset makes use of these, and they're freely
editable. It's a clever and useful system.

Engines, oiled
Each of Pigments' two engines can be switched
between Analog and Wavetable modes. The
Analog engine comprises three oscillators, each
outputting a sine, saw, triangle or square wave

"Ambitious, expansive and oozing quality, Pigments easily earns a place at the top table of synthesis"

(the last two featuring PWM), and a noise generator that sweeps from Red through White to Blue noise. Osc 2 can sync to Osc 1; Oscs 2 and 3 can have keytracking disabled; and Oscs 1 and 2 can be frequency modulated by any mix of Osc 3 and Noise. The Drift control introduces random pitch fluctuations for a touch of analogue authenticity, should you want it.

The Wavetable engine draws upon more than 100 categorised wavetables (Natural, Processed, Synthesizers, etc). Each one of them consists of up to 256 waveforms, and the Position knob can be set to jump from one wave to the next, or to interpolate through them more smoothly. Phase Distortion and Wavefolding functions open up some serious destructive waveshaping possibilities, and both – along with Phase and Frequency – can be conveniently modulated by an ancillary (and, optionally, audible) analogue/noise oscillator.

The Wavetable engine can also stack up to eight unison voices, detuned freely or snapped to chords – we're puzzled as to why the Analog engine can't do the same. Import of external WAVs into the engine is permitted, but alas, there's no wavetable editor.

The two engines feed into a pair of independently pan-able filters, routed in any blend of series and parallel via a continuous knob. Eight filter types are onboard: SEM, Matrix 12 and Minimoog emulations, the 64dB/octave Surgeon, Comb, Phaser, Formant, and the supremely versatile MultiMode. Between them these serve up a rich variety of modes and sonic styles, and we very much appreciate being able to select and apply an FM source directly from the filter panel.

With modulation covered in *Colour me rad*, we'll head straight to the FX section, which houses three busses of three effects each, selected from a roster of 13 largely workaday essentials – Reverb, Delay, Compressor, Distortion, EQ, Flanger, Wavefolder, etc. Busses A and B are 'inserts', reorderable in series or parallel, while Bus B is a send/return, and the processors themselves sound great.

Modulation sources are edited in the tabbed bottom section

Colour me rad

With the exception of certain FX parameters, every knob in Pigments can be modulated, from the Wavetable engine's Phase Distortion amount to the Sequencer's Rate. As well as the expected LFOs and envelopes (three of each, with selectable Reset and Gate triggers), Macro knobs (four) and MIDI sources (Velocity, Modwheel, etc), Pigments includes the more imaginative Functions, Random and Combinate modulators. The three Functions generators are 64-point envelopes/step sequencers, while the Turing, Sample & Hold and Binary Random sources each output their own brand of chaos, and the two Combinate

modules merge pairs of sources using various mathematical processes.

Assignments are made by selecting a modulator in the Overview strip, then dragging the collars around each target parameter knob to set the depth. Alternatively, clicking the + button next to a knob switches the Overview strip to a bank of depth sliders: set the sliders to modulate the knob. Each pairing can have a Sidechain source assigned, too, for depth modulation.

The controls for the modulators themselves sit in the tabbed bottom window, and every signal is beautifully visualised there, in the Overview strip and in the collar around each knob.

Set the length of each lane independently in the Sequencer/Arpeggiator's Polyrhythm mode

Finally, the Sequencer/Arpeggiator is all kinds of awesome, featuring scale snapping, a Trigger Probability lane, a powerful cyclically regenerating randomisation engine, and the best implementation of polyrhythmic sequencing we've seen in any synth to date.

The colour of sound

Ambitious, expansive and oozing quality from every pixel, Pigments easily earns a place at the top table of synthesis. The Wavetable engine, filters, sequencer and modulation stand out as headline features, but the whole thing impresses from end to end.

As the epic preset library ably demonstrates, there's no area of synth sound design in which it doesn't excel; phat basses, tearing leads, amorphous pads, kinetic sequences, ear-catching FX. Polychromatic, you could say. And given its depth and complexity, it's hard to imagine how Arturia could have made it any easier to use – the work they've done in that regard is hugely commendable.

Our chief complaints are the lack of wavetable editing and Analog unison, but honestly, don't let either of those omissions dissuade you from experiencing this incredible instrument for yourself. **cm**

Web arturia.com

Alternatively

Synapse Audio Dune 3
cm267 » 10/10 » €199
Also combines analogue and wavetable techniques, and features insane amounts of unison

VPS Avenger
cm238 » 10/10 » €199
A feature-packed synthesis and sampling workstation, complete with built-in drum machine

Verdict

For Powerful but easy to use
Wavetable engine is a beast
Phenomenal modulation system
Sounds stunning
Sound design tips feature is cool

Against No Analog engine unison
No wavetable editing

With its voluminous, expressive sound and inspiring interface and architecture, Arturia's first homegrown synth is a marvel

10/10