

## Access Virus C Review

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 Saturday, 10 November 2007  
 Last Updated Thursday, 01 October 2009

Hands on Review of the Synthesizer Virus C. (Sample Review from SOS magazine)

ACCESS VIRUS C Access Virus C Modelled Analogue Synthesizer  
 Reviews : Sound Module

Access have managed to add some excellent features to their Virus synth in the past simply by upgrading its OS, but the march of progress means that a hardware revision is eventually necessary. Does the new Virus C do enough to keep up with the virtual-analogue crowd?

Nick Magnus

From as far back as the ill-fated PPG Realizer in 1986 to the present day, everyone, it seems, has had their own take on analogue synth modelling. Korg's Z1 and MS2000, Roland's JP8000, 8080 and SH32, Novation's Nova and Supernova, Clavia's Nord Leads, Yamaha's AN-series, Waldorf's Q, Oberheim's OB12, and of course, the Access Virus have all jostled for supremacy at the top of a growing mountain of digitally simulated oscillators, filters and ADSRs. Not forgetting, of course, the plethora of software plug-in equivalents that seems to grow by the minute (in an interesting reversal of the trend from hardware to plug-ins, Creamware recently announced their new Noah keyboard and expander module &mdash; the first such hardware instruments from a company known to date for its software). Despite the popularity of the 'computer-plus-software' approach, hardware units such as those I've just mentioned remain very much in demand, and thus the competition continues to rage amongst virtual-analogue aficionados over who has the most oscillators, polyphony, filters, effects, knobs, or other unique tricks up their virtual sleeves.

One advantage enjoyed by the current generation of synth technology is that instruments can be upgraded very easily by the user. In most cases, all it takes is a visit to the company web site to obtain a free download of the latest software version. Occasionally, a new update can be so radical as to almost completely redesign the synth &mdash; not just fixing operational bugs, but adding whole new feature-sets the instrument didn't previously possess. However, there comes a point in a modern synth's lineage when a hardware upgrade becomes desirable, or even necessary to accommodate new software functions &mdash; or simply to improve the physical ergonomics. And such is the case with German synth company Access, and their Virus.

Access's Virus A and B models, the Indigo and Virus Rack have earned themselves a strong fan base since the first version appeared in 1998, and the series is now in its third incarnation, known as (you guessed it) the C series. All previous A and B models have now been discontinued, although the most recent upgrades for these can still be found on the Access web site ([www.access-music.de](http://www.access-music.de)). The Indigo has been replaced by the Indigo 2, and the Rack with the Rack XL. Which brings us to the Virus C, the unit on review here, which has had a total makeover, both cosmetically and in terms of its operating system &mdash; it's now at version 5.0 at the time of writing.

Looking Good...

The Virus C looks fabulous. The predominantly black livery is punctuated with 69 status LEDs and a backlit display, all glowing with a deliciously evil red worthy of a Borg Queen. Even the wooden end-cheeks look as they have been rubberised in some way. For such a small box, the 'C' is reassuringly heavy, adding to the impression of solid, tank-like construction. My only reservation here was concerning the rear jack in/out connections, which appear to be soldered onto the circuit board rather than being bolted to the chassis, resulting in a bit of socket wobble. Care should therefore be taken not to apply any lateral pressure to any leads that are inserted.

Access Virus C £1000  
 pros Excellent design and solid construction. Some important features can now be accessed via the front-panel controls. It sounds like the real deal. It's also capable of extreme tonal gymnastics, beyond what your average analogue polysynth can muster. It's even great as a stand-alone processor for external sounds. Sorry, but I like the manual!  
 cons The Global reverb/delay is a restriction in Multi Mode. No dedicated drum part(s). Arpeggiator not user-programmable. Vocoder a tad 'gritty', and tricky to set up from scratch. Still no separate headphone socket!  
 summary A beautifully designed little beast with a huge personality. The hardware makeover was well worth the effort, and the new

software brings among other things a welcome increase in modulation options. You can't fail to have fun with this, or to find inspiration playing it. While it doesn't do everything you might wish for, it has enough unique features to stand proudly on a pedestal of its own.

## Moving On Up

Most significantly, polyphony on the Virus C is now increased from 24 to 32 voices, subject to certain conditions. For example, if Oscillator 3 is used, it can reduce the total polyphony by up to six voices (if many parts in a Multi setup use Oscillator 3) or by an extra one-third of a voice per note played in Single Mode (in other words, a three-note chord would use four voices of polyphony). The vocoder will also reduce polyphony (by up to four voices for the full 32-band version) but only while a signal is present at the input. The Virus thoughtfully frees up all voices again 10 seconds after the input signal has ceased.

Not only has the polyphony increased, but Access have made available a 1024-patch optional soundset, including six Banks of new ROM patches, occupying Banks C to H. Downloadable from the Access web site, this soundset brings the total available patch count to 256 User, 768 ROM and 128 Multi Patches.

Whilst the synthesis engine of the Virus C is essentially the same as a fully updated B, a number of changes have taken place on the front panel to improve functionality, speed access to certain features, and perhaps to address certain criticisms levelled at the previous models.

Those familiar with the Virus A and B will have already noted the C's new panel layout from the photos accompanying this article, in particular the dense cluster of LEDs in the LFO/MOD section (see below), whose function it is to make clear whether certain modulation routings are active. Since the Virus modulation possibilities are both numerous and complex, this could prove to be a life-saver when trying to keep track of a sound's architecture.

In response to popular comment, a number of front-panel hardware additions are now evident. The Effects now have a section of their own (see below), whereas on the A and B models these settings were all hidden within Edit menus accessed via the LCD. Firstly, two knobs to control Type/Mix and Intensity are shared by the distortion, phaser and chorus effects (each effect selectable in sequence via a button) whilst below those, the reverb/delay has controls for Send, Delay/Reverb Time and Feedback/Damping. Both groups of effects have Edit buttons that will take you to more detailed parameter menus.

Also new is a dedicated On/Off button for Oscillator 3. This works in conjunction with the Oscillator Select and Edit buttons to facilitate access to the functions of the third oscillator, although there remains no easy way to 'solo' its output.

**Stop Press** As this review was going to press, news reached us that Access had released a updater for Emagic's SoundDiver editing/librarian software to reflect the changes made to the Virus C. You need a full retail version of SoundDiver or the SoundDriver Virus version of the program to use the update, but if you have these, you can download it for free from the Access web site. The two user-definable 'soft knobs' (shown below the LCD in the picture on page 44) have migrated from the left of the panel to the bottom of the centre. This juxtaposition of knobs and display brings with it the option to have assignable knob names per patch, thus serving as a useful reminder of which knob does what. These names can be chosen from a list of either parameter names or descriptive words such as 'attack', 'cutoff', 'decay', or even more synaesthetic terms such as 'fear' 'hype' and 'infect'! An option to create your own would add another fun, personal touch.

The Arpeggiator now has a front-panel On/Off switch (I should jolly well think so too!) and an Edit button to gain entry to its function menu, whence you can select modes, octave range, swing, hold, clock divisions, note length and preset patterns. Whilst it would have been preferable to have more of these arpeggiator functions as hardware controls, limited panel space precludes this &mdash; but let's not forget that any two arpeggiator parameters can be assigned to the soft knobs, so it's not as bad as it seems. Let's hope a future OS upgrade includes user-programmable arpeggios &mdash; the 40 preset patterns on offer are useful, but there's always going to be a pattern you'd like that isn't included. While we're on the subject, a 'strum' function would be a handy addition...

The 'Random' function now has its own button (the parameter Amount and Depth settings are to be found in the System menu) and just below this resides the oft-requested Undo/Redo button. As expected, repeated toggling alternates between the last parameter change and its previous state. The Virus' Undo function is particularly clever, in that it can revert to the last edited sound, even after a program change &mdash; or several &mdash; just as long as any newly selected program has not itself been edited. The same goes for Multi Mode; all 16 part edit buffers can be recalled even after a new Multi Program has been selected. This is seriously good planning &mdash; other manufacturers take note!

The C's modulation matrix sources and destinations have been increased from the three sources and six destinations on the B model to six sources and nine destinations on the C. Source Assigns 1, 4, 5 and 6 have one destination each, while Source Assigns 2 and 3 can have two and three destinations respectively. OS v5.0 also includes a Compare

function, vital for locating a home for that killer patch you've just programmed or for confirming that you have in fact made an improvement to a sound, rather than having lost the plot good and proper.

In common with many synth modules, the Virus C has no keypad with which to call up patches directly. This is partly ameliorated by being able to search for patches by sound category; nevertheless I found it fairly tedious having to scroll through patches (especially so many) to get to a specific location. OK, panel space is limited, and Access have done well to accommodate users' demands for more hardware control of important functions without increasing the size of the original instrument. Of course, sending program changes from a master keyboard is an option, but there are bound to be occasions when that is neither practical nor desirable. Ah well, you can't have everything.

Finally on the hardware front, a tempo indicator LED has been included &mdash; a helpful reference tool bearing in mind that anything time-based or cyclic in the Virus can be clocked either by MIDI or by its own internal clock.

**New Virus C Soundset Patch Highlights** Installation of the new soundset on the review Virus left User Banks A-B untouched. Despite this, I'd always advise that you back up your Banks before upgrading. Recommending a handful of patches is always a subjective issue, especially from such a huge selection. One man's meat is another man's mashed swede, but these tickled my particular fancy...

C7: 'Chillout' &mdash; a moody pad with random LFO filtering. The shifting resonance creates rhythmic accompaniment reminiscent of Roland TR808 toms.

C15: 'Creamery' &mdash; an atmospheric, biblical choir going 'mmmmmm'. Mmmmmm.

C60: 'Longskrt' &mdash; one of those dreamy, wavering Vangelis-like sounds reminiscent of the Blade Runner soundtrack.

D9: 'Boingy' &mdash; a bouncy, arpeggiated rhythm provides tuned low 808 toms, a ticky rhythm and jew's harp all at the same time.

D13: 'Canterbury' &mdash; a reference to the 'Canterbury Bands' such as Hatfield and the North and Caravan. It's similar to that fuzzed Rhodes piano-cum-Davoli synth sound typical of that era!

D15: 'Choir2' &mdash; a surprisingly good, gentle choir sound for an 'analogue' synth.

E44: 'Entropie' &mdash; very '50s sci-fi. You'll be wearing Mylar and floating in space before you know it...

E74: 'PulsRay' &mdash; an update on the famous Roland D50 'Glass Voices'.

E107: 'Tomita' &mdash; it does exactly as it says on the tin. Very dreamy.

F7: 'Bad' &mdash; good arpeggiated rhythmic backing, like playing a taut metal wire with drumsticks.

F69: 'Moon Pad' &mdash; slightly reminiscent of Structures Sonores. Perfect for scoring that weird, cult genre movie. Think Cube.

G10: 'Bowzerz' &mdash; big, fat and juicy, this bass sound can carry a tune as well.

G71: 'ObiPad' &mdash; a smooth, mellow pad with plenty of pulse-width modulation that sounds great with the Phaser.

H95: 'T-Dream' &mdash; send this arpeggiated backdrop through the onboard delay for instant Germanic synth-pop.

### Some Viral Highlights

Existing Virus fans won't need to be told how good this synth sounds. Those of you who have not yet been exposed to this particular bug will want to know what symptoms to expect (actually, I think I did quite well, getting this far before doing The Medical Metaphor...). The Virus tackles classic analogue synth sounds with great conviction (see the 'Patch Highlights' box below for a few specific recommended factory patches), at the same time providing many excellent tools that go some way beyond the standard oscillator/filter/ envelope architecture. Of particular note are the comprehensive modulation routings, which enable almost every variable parameter of the Virus to be modulated. Even the modulators can themselves be modulated, producing tones of great timbral complexity and animation. I particularly like the dual filters, which can be configured either in series or in parallel, given independent envelopes, and then panned in stereo &mdash; giving you two sounds for the price of one. Unison Twin Mode is also host to a very nice stereo layering effect, which is great for making those pad sounds really expansive.

Located (curiously) in the Effects section, Analogue Boost can be used rather like an 'appendix' [groan! &mdash; Ed] to the filters &mdash; the Tune parameter appears to highlight a narrow-ish frequency band, while Intensity applies a boost, as you'd expect from the name, to that spectrum. The function is particularly useful for fattening up the bottom end, and can be equally helpful in adding a little sparkle to the upper range, giving a subjectively different result than using the EQ effect. And talking of which... the EQ effect itself is especially welcome, offering three freely sweepable bands and a variable Q for the mid-range. The EQ's parameters are among those that can be modulated, thus giving you another way to generate moving, filter-like effects. Finally, Access must be congratulated on the phaser, which is a real corker, and sounds just the way you want a phaser to sound. Try it &mdash; trust me, you'll soon see what I mean. The Vocoder The vocoder section of the Virus has an implementation which deserves a mention, and is worth comparing with the vocoder found on one of the Virus' closest rivals, the Novation Supernova.

When the Virus' vocoder is active on a patch in Single Mode, the entire filter section is disabled, and its controls are used to vary specific vocoder parameters. What you end up 'vocoding' is the direct output from the oscillators and/or noise generator. Here's a quick rundown of the filter controls' altered functions. The Filter Release control sets the number of vocoder bands, from 1 to 32 (the more bands, the more 'intelligible' the end result.) Cutoff Frequency controls the

vocoder's centre frequency, while the Env Amount knob controls Frequency Spread. This can be set individually for the Carrier (Filter 1) and the Modulator (Filter 2) and is interactive with the centre frequency. In addition, these controls interact with the Modulator frequency offset (previously Cutoff 2) and the Q-Factor (néé Resonance...).

If this all sounds pretty complicated, you're right &mdash; it is. There's nothing for it but to twiddle away and experiment, and fortunately patch bank B has a selection of templates (B110-B126) to get you going. I soon had a Radio 3 programme transformed into some pretty weird alien soundscapes. However, I wasn't convinced by the C's 'pure' vocoder sound, finding it rather gritty and occasionally lacking in intelligibility, even using all 32 bands. But hey, in this lo-fi, grunge-motivated era, that ain't necessarily an undesirable quality.

In contrast to this, the vocoder found on the Supernova is implemented in an entirely different manner. The vocoder algorithm operates autonomously from the filters &mdash; ie. the filters, filter envelopes and every other parameter used to create the Carrier (the patch being vocoded) are left completely intact &mdash; thus you are vocoding a 'complete' patch. With the exception of Sibilance (of which more in a moment), there is no fancy control of the vocoder's parameters per se on the Supernova, so any weirdness is more or less down to the nature of the modulating signal and the complexity of the Carrier patch itself.

The Virus C can also be made to work in a similar way to the Supernova by setting up a Multi, using a vocoder patch on one part, a complex patch on another, then routing that patch through the vocoder using one of the Virus's internal busses.

While it seems that the Virus vocoder scores the higher points for versatility and off-the-wallness, it has to be said that the Supernova ultimately scores Brownie points for the quality of its sound &mdash; principally because if you wish it, every vocoded syllable is crystal clear. This could in part be due to the Virus lacking a Sibilance parameter, which in the case of the Supernova greatly aids the identification of consonants, and also perhaps because the Supernova's vocoder has 42 bands as opposed to the Virus' 32, lending it a smoother sound.

## Compare & Contrast

An opportunity to examine the Virus C closely was of particular interest to me, having recently purchased a Novation Supernova II Pro X keyboard, and having extensively used a Roland JP8000. Comparisons with the JP8000 are arguably no longer relevant, limited as it is by its eight-voice polyphony and lack of multitimbrality, although its sound-morphing capabilities and Motion Control (knob sequencer) certainly gave it a leading edge on its first release.

The Virus and Supernova are without doubt equally effective at 'being' analogue synthesizers; I was able to set up similar standard polysynth sounds on both machines with relative ease, and there was precious little to tell them apart. The differences become more apparent at other levels. The Virus C focuses in detail on sound-mangling possibilities; it has more waveforms, more modulation options and numerous ways to distort and warp the waveforms' original shapes. The Supernova, on the other hand, whilst no slouch in that department, has rather more hands-on hardware on its panel, and much of its design seems to concentrate on providing the maximum flexibility for multitimbral performances. To this end, it has (optionally) more polyphony, and truly multitimbral delays and reverbs rather than a single global one, as on the Virus. There are four stereo outputs on the Supernova, so you can make full use of outboard processing, you can program your own arpeggiator patterns, and dedicated multi-tonal drum programs can be assigned to performance parts. Oh &mdash; and it's worth noting that the Supernova's vocoder doesn't place any toll on the total polyphony &mdash; neither, indeed, does the number of oscillators employed in a patch.

There is simply not room here to draw up a full feature comparison, and indeed this review is not intended to be a head-to-head. The comparisons are merely drawn to point out the apparent design goals of two major players in the analogue modelling market, and to recognise the fact that prospective buyers of this type of instrument will have different priorities according to personal taste.

The Manual I know it's virtually expected that reviewers should carp about manuals &mdash; we all do it. Yet how often is it that a manual deserves praise? Call me mad, call me irresponsible... but I think this one does. Opinions over the Virus manuals seem quite polarised, judging by comments made by end-users and some past reviewers &mdash; but my reason is this: rather than the usual impersonal list of parameters and inscrutable comments ('...select Transphasic or Interspatial to modify the tripolar skew ratio...') the Virus C manual comes across as friendly, educational and entertaining. It begins with a 'novice' section that is well worth the read even if you are anything but a novice, guiding the reader through the various features of the Virus step by step, with clear examples to try out yourself. It explains what the features and parameters do, and very importantly, why you would use them &mdash; something conspicuously absent from many manuals. At the end of the basic tour, I felt that even a 'Virus Virgin' would feel comfortable with the fundamental principles of operation. I would agree, however, with past reviewers' comments that some block diagrams could have been included to help drive home some of the concepts discussed in the manual.

## Conclusions

The Virus C is a gorgeous instrument, equally at home reproducing anything from all-out American polysynth overkill to hardcore trance and ambient textures. As a means for transforming external signals into something weird and wonderful, it's also bags of fun, and once you become familiar with its menu structures, programming can be as easy or as complex as you want to make it. I would like the vocoder to have been less convoluted to set up and to offer a greater degree of intelligibility, but there are still endless creative possibilities to be uncovered regardless of this. Given the Virus' indisputable talents in the analogue percussion department, the absence of a dedicated drum part is a shame, and somewhat restricts its use as an all-in-one box. Nevertheless, most musicians interested in that aspect of production will in all likelihood have such percussion duties well covered by other devices, the advantage being that the Virus' polyphony can instead be reserved for making all sorts of other groovy noises.

The Virus has a big sound, a big personality and no shortage of tricks up its virtual sleeve, making it an excellent addition to (or centrepiece of) any studio setup, and one which is certain to become indispensable within minutes of powering it up. The only difficulty you might have is deciding which Virus to go for, as OS v5.0 is compatible across the entire new range &mdash; in other words, the Virus C, Virus kC, Indigo 2 and Virus Rack XL all now enjoy the same 32-voice polyphony and features as each other. Ah, choices, choices...