

# VIRUS | TI

HARDWARE SYNTHESIZER · SOFTWARE PLUG-IN · AUDIO&MIDI INTERFACE · CONTROL SURFACE

## SOFTWARE SPECIFICATIONS

### > Huge Voice Count ...

As a result of a complete hardware redesign, the heart of the new VIRUS TI series features a dual core DSP system with a high-speed local buss. This combo is capable of cranking out 80+ voices under average conditions. Also thanks to the new design, we were able to improve the overall system response time (sometimes referred to as *latency*) which makes the VIRUS TI Series even snappier, especially for live musicians.

### > Delay and Reverb per part...

Each of the 16 parts in multimode can have it's own, dedicated delay and reverb. In other words, there are now 16 delays and 16 reverbs.

### > Wavetable synthesis oscillators

In addition to the award winning VIRUS oscillators the VIRUS TI series introduces Wavetable oscillators. These sophisticated new oscillators put a completely new array of sounds at your disposal. From gritty, screaming, somewhat LoFi sounding textures to silky-smooth wave cascades - the sky is the limit. Now imagine processing the WaveTable with Access' self-resonating MiniMoog™ Filter...

A mixture between VIRUS oscillators and WaveTable oscillators is also possible.

### > HyperSaw oscillators

HyperSaw is a multi-sawtooth oscillator. With a single parameter the user can alter the amount of parallel oscillators from 1-9, smoothly and in realtime. You can literally add more oscillators to fatten up the sound whilst playing a chord. The relative tuning and spread can be controlled as well. Using the highly efficient HyperSaw engine with 9 parallel oscillators per voice (each with it's own parallel sub oscillator) the VIRUS TI series can calculate over 1800 oscillators in realtime!

### > Programmable Arpeggiator

The VIRUS TI features a user-programmable arpeggiator. Every single VIRUS TI patch can store it's own arpeggiator pattern. You can build new patterns from scratch or use one of the 64 presets as a foundation.

### > Refined Multi Mode

The multi mode and multi/single mode structures have been streamlined and refined. The new Multi Mode doesn't just reference every patch in each of the 16 parts (as most synthesizers do); it embeds all patch data for every part. There is no longer any need to be cautious of editing single sounds that might be used by multi mode patches. Sounds can be tweaked and tailored to build stacks or to compliment each other without the risk of overwriting a patch which may be used in another song or MultiMode preset. The second new mode is the Sequencer Mode, which replaces the Multi/Single mode from the VIRUS A-B-C series. In contrast to the new Multi Mode, it references the patches in single mode, so you could say

that it makes the VIRUS TI Series feel like a synthesizer with 16 true single modes.

### > Even Bigger Modulation Matrix

Mod Matrix is now comprised of 6 slots; each with one source and three destinations.

### > PureSemitones

PureSemitones tunes the oscillator's semitone knob to pure intervals. The technology, derived from Access' PureTuning, tunes the intervals of the semitone parameter to the nearest harmonic and therefore combines a linear scale with intervals which are perfectly in tune. Sync sounds especially benefit from PureSemitones.

### > Knob Quantise

Knob movements can be quantised to create gritty, jagged controller movements. The parameter changes on continuous parameters will be synchronized to the internal or external clock. A clock ratio can be selected in SmoothMode just as it can be for the LFOs. Any parameter change is only updated on the selected beat and held until the next beat. The result is a stepped parameter movement, as in a step sequencer or sample and hold modules.

## HARDWARE SPECIFICATIONS

### > Dual Core DSP system

The VIRUS TI DSPs are not only faster, they come in pairs now. A highly effective local buss in between the processors boosts performance even further.

### > Bigger Display

In fact, a much bigger Liquid Crystal Display, which can show graphics (128x32 pixels). The display shows up to 4 rows of text and graphics. In most cases three parameters are being displayed at the same time. As a result, there are only 1/3 of the menu pages in comparison to the previous VIRUS series.

### > Extended Memory

512 RAM patches and 2048 ROM sounds + 16 Multi Mode slots which embed all patches used.

### > Studio Grade D/A Converters

192 Khz studio grade D/A converters (+4dB balanced output), with optional soft limiting algorithm. 24 bit A/D converters.

### > Quicker Editing

3 edit knobs underneath the display which can edit three parameters at the same time. The 3 soft knobs can also act as programmable and nameable knobs for every individual patch.

### > Tap Tempo

There is a dedicated Tap tempo button. The tap tempo algorithm used is based on SyncXTreme,

Access' acclaimed tempo sync algorithm introduced last year for the VIRUS C series.

### > Digital I/O and USB

The VIRUS TI comes with SP/DIF (44.1khz/48khz) digital I/O as standard. The USB port is compatible with the USB 2.0 Specification and works with USB and Hi-Speed USB systems, peripherals and cables. Read more about the USB Audio/MIDI integration on the next page.

### > Better Overview

New front panel layout with redesigned sections and SHIFT button for easy access to even more parameters through the front panel.

### > Simplified User Interface

EXIT button for easier navigation (EXIT gets out of a menu back on the *play* page)

### > Quicker Mod Matrix Navigation

Dedicated buttons to scroll through the Mod matrix slots and destinations

### > Painless rack mounting

The entire I/O board can be rotated by 90 degrees which makes rack-mounting the VIRUS much more fun. Instead of having to find special jack plugs or waste loads of rack space, simply turn the whole I/O section and voilà! - all the sockets are at the back of the rack mounted VIRUS TI Desktop. (VIRUS TI Desktop only)

### > Illuminated Logo

Illuminated Access Logo on the rear of the VIRUS TI Keyboard and VIRUS TI PØLAR (=VIRUS Indigo successor). The logo pulsates in standby mode, and can be statically on during normal operation or pulsate to the tempo (like the tempo LED) which is especially nice for those drummers used to playing to a visual tempo source.

### > Rack-mounting kit included

Rack mount kit included (user can replace wooden side panels with rack ears). (VIRUS Desktop only)

## I/O CONFIGURATION

All connections to *the outer world* have been drastically improved

- 6 Symmetrical outs with +4dB studio level
- Optional Soft Limiting for every output
- 192 Khz/24bit D/A converters
- 2 Inputs with 24-bit A/D converters
- 4 different input sensitivities
- USB for audio, midi and data connection
- S/PDIF In/Out for Digital I/O.
- Dedicated headphone out.

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## TOTAL INTEGRATION

### > What is "TI" Overview?

TI stands for TOTAL INTEGRATION which is our new technology to create a tight link between the user's computer and the VIRUS.

TI is scalable to allow maximum flexibility. Everything from a simple USB based operating system upload, to turning the VIRUS into a combined Sound Engine, VST/AU instrument, Master Keyboard, Audio Interface and MIDI interface is possible.

From *inside* a sequencer host, the VIRUS looks like a VST instrument or Audio Unit. The VIRUS TI transmits up to 4 sub-mixes (2 stereo sub-mixes) right into the VIRUS TI plug-in which acts as a multi-channel audio instrument.

Connected to a computer, you also may use the audio and MIDI ports on your VIRUS TI to connect it to an analog desk and MIDI interface or choose a more advanced approach... Once connected via USB your sequencer can send it's master output through the VIRUS' studio grade outputs. The VIRUS input section can be used to record audio as if it were a well-equipped soundcard. The MIDI ports turn into a MIDI interface which can talk to other keyboards or effects.

Thanks to Access' proprietary driver technology the VIRUS becomes the first hardware synthesizer with sample-accuracy timing with a delay-compensated audio/MIDI connection to your favourite software sequencer. Forget about sloppy arpeggiators and basses you can't decide are playing before or behind the beat.

Sound editing and management has never been easier. The patches used in a song are stored with the song, which gives you instant total recall without the need to record a single SysEx dump.

No configuration is needed. The plug-in searches and finds the VIRUS automatically. All you need to do to play the VIRUS and select the VIRUS TI plug-in within your sequencer application.

All parameters of the VIRUS show up with their real names in the automation dialogs of compatible sequencers.

### > The VirusControl Plug-in

...comes as a Mac/PC VST instrument and Apple Audio Unit. It is the VIRUS' hub to your sequencer application. The plug-in manages your sounds in the VIRUS as well as on the hard disk. It receives audio data from the VIRUS and streams them into your sequencer application as if you were playing a native audio instrument. It is a multi-channel instrument plug-in which can split the several sub-mixes from your VIRUS TI to be independently processed and refined with additional VST plug-ins. It also handles all relevant information for your sequencer's automation system.

Forget about looking up MIDI strings to control a certain parameter in your VIRUS – with the VIRUS TI plug-in you can select the parameter to be automated in the same way you do it with other VST/AU plug-ins.

### > Remote Templates

Switching the VIRUS TI to Remote Controller mode enables you to control your favourite synths and virtual instruments using the knobs. Every knob on the front panel generates a specific MIDI message which changes the equivalent parameter on the remotod synth. The display shows a user-definable name for every knob.

There are templates available for many soft- and hardware synthesizers. You can even create your own templates using the VIRUS TI plug-in and store them in any of the 32 memory locations in the VIRUS.

The audio connection in between the VIRUS TI and the virus remote vst instrument or audio unit. Up to 4 mono submixes or 2 stereo submixes can be transmitted at once. It's like working with a virtual instrument including sample accuracy timing. You even can process individual virus parts with additional VST/AU plug-ins.

The VIRUS TI's main outs become your sequencer's master outs with studio grade balanced outs. No need for an additional audio interface.

Use the VIRUS' audio ins to record an instruments with your sequencer. Again, no need for an additional audio interface.

Connect outboard midi equipment such as keyboards or effects using the VIRUS' midi interface. No additional midi interface needed.

VIRUS TI stands for ease of use. The entire system automatically configures itself.

From a sequencer point of view the VIRUS TI is a combined dual dsp core soundengine, audio- and midi interface. In other words, the most advanced laptop studio available at present.

## FLOW CHART

