



A3000

PROFESSIONAL SAMPLER

Version 2

Yamaha is pleased to announce Version 2 of the A3000 Professional Sampler. Version 2 adds important new performance, editing, and utility features that make the A3000 even more powerful and even easier to use.



MAJOR NEW FEATURES

LOOP REMIX. Automatically rearranges a looped breakbeat into new variations. Gives you lots of new mileage out of your breakbeat patterns.

LOOP DIVIDE. Automatically slices up a breakbeat pattern and maps the pieces to different keys along the keyboard. You can then generate your own variations manually at the keyboard.

Ten new filter types. Version 2 now offers you a total of 16 different filter types.

MIDI-controlled LFO. Version 2 adds a powerful new LFO type that you can set up separately for each program. This new LFO can be driven by an external MIDI clock and controller — so that you can control LFO modulation in real time.

Surprise Yourself!

The Yamaha A3000 Version 2 is a powerful, versatile, and easy-to-use professional-level sampler with a sound and style all its own. Its realtime control knobs, intuitive panel design, easy-edit voice architecture, multiple effects circuitry, dynamic filters, and many other great features give you the power and freedom you need to surprise yourself with your own creativity.

Designed specifically for professional sampling, the A3000 captures those lightning bolts of inspiration as they strike. Its full range of handy sound processing tools and realtime control features let you style complex customized sounds without resorting to racks of external gear. An ideal workhorse for techno, jungle, hip hop — literally all types of modern electronic music — the A3000 has something for everyone.

- Professional musicians and sound designers will love the Easy Edit functions, the cross-platform file support, and the other time-saving features that increase productivity in high-pressure composing and recording situations.
- DJs will love the sample-mapping features, the original and easily configured effects and filters, and the many realtime performance features that can help keep the dance floor hopping.
- Beginners will love the intuitive design, which demystifies the sampling process and permits great-sounding results with a minimum of time and effort.
- And everyone will love the irresistible price.

Style And Substance

The A3000 puts everything you need at your fingertips, with all main functions printed on the matrix on the front panel. All parameters are instantly accessible at the quick touch of a mode switch and function key, or at the simple twist of a control knob. A 40X2 LCD provides plenty of visual feedback at each step along the way.

And that's just the outside. Inside, you get 16-bit sampling with 64 notes of polyphony, 2MB of RAM (expandable to 128MB), dynamic filters, multiple effects circuitry, equalizers, and everything else you need to create spectacular phrases and breakbeats.

Samples, Banks, and Programs

Recording a great sample is easy: Just plug in your stereo or mono source, set the sampling rate and other recording parameters, and there you go.

Each sample is stored as a combination of wave data and parameter settings: the wave data provides the basic sound, and the parameters set the sample's note mapping, velocity limits, layer/split operation, MIDI channels, filtering, and so on. Since you can use the wave data from any one sample to build any number of other samples, you'll find that it's easy to create complex and highly customized breakbeats and phrases from the smallest amount of recorded data.

The A3000 will also let you copy samples into groups called sample banks that can be used to set up multisampled instruments and drum kits. Sample banks are also ideal for mapping related samples across a keyboard for triggering in a realtime performance.

Once you have generated your samples and sample banks, you can arrange them into programs that you can play using external keyboards and other MIDI devices. The A3000 stores 128 programs in RAM at any given time, allowing you to switch instantly from one to the other. You can set up effects separately for each program.

Powerful Editing Tools and Realtime Control

The A3000's powerful editing tools are perhaps its most impressive feature. You can carry out editing at all levels: on samples, on sample banks, and on programs. This gives you tremendous ability to control the final sound and operation. The unique Easy Edit feature, which works at the program level, lets you make quick adjustments to the program without affecting the underlying samples.

You can also "edit as you go" by adjusting the sound in real time during playback. The A3000's controller matrix functions allow you to assign various parameters to arbitrary MIDI controllers, so you can control the action from an external MIDI device.

Great Filters and Some New Functions

With Version 2, you get a total of 16 built-in dynamic filter types: from conventional low-pass and high-pass filters through to innovative 2-peak and other compound filters. You can set and edit filters separately for each sample, and you can control the filter in realtime using MIDI controllers or the front-panel knobs.

Version 2 also provides two entirely new functions that will help you find new ideas. The intelligent LOOP REMIX function automatically divides a breakbeat into individual beats, then rearranges them to give you a smart new variation. The LOOP DIVIDE feature automatically slices up a breakbeat pattern and maps the pieces along the keyboard, so that you can generate variations on your own in real time.

Effects and Modulations

The A3000's high-quality DSP system offers a wide variety of effects, together with sophisticated effects circuitry that lets you apply the selected effects either independently or in series. It also offers two LFO types: sample LFOs and program LFOs.

First, consider the effects implementation. You get 54 different effects: from old standards such as Hall, Room, and Stage, to more sophisticated effects such as Aural Exciter®, Pitch Change, and 3-Band EQ, to special techno and dance effects such as AutoSyn (synth sound), TechMod (ringing modulation), Radio (lo-fi radio static), and TurnTable (clicks and pops). You can apply extensive editing to each effect by adjusting its numerous parameters. You apply an effect by assigning it to one of the three independent

effect blocks. You can then set these blocks to operate separately or in any of several combinations.

Next, consider the LFOs (low-frequency oscillators). Where Version 1 offered a separate LFO for each sample, Version 2 now includes another LFO that you can set up separately for each program. The sample-level LFO can be freely set to modulate the sample's filter, pitch, and amplitude. The new program-level LFO modulates the program's effect parameters and the entire set of sample parameters. The program LFO can be driven by an external MIDI clock, allowing an external sequencer to control the LFO frequency in real time.

Song Sketchpad, Enhanced Data Compatibility, and Great Options

Versatile to the core, the A3000 includes a handy MIDI sequencer for quick and easy recording and playback of song sketches, and for playback of format-0 standard MIDI files imported from floppy disk. It also gives you great data compatibility: you can load data from popular samplers such as Akai®, Roland®, and E-mu®, and you can load AIFF and WAV files from floppy disk.

The A3000 supports installation of the optional AIEB1 I/O expansion board, offering six additional assignable outputs as well as coaxial and optical digital I/O. You can also install a SCSI hard disk. Version 2 now supports hard-disk sizes up to 8GB.

An easy – to – install upgrade kit is available for purchase by Version 1 owners.

Aural Exciter is a registered trademark and is manufactured under license from Aphex System, Ltd. All other trademarks and registered trademarks are the property of their respective owners.

The LCD provides plenty of information about currently selected functions and parameters. The display is keyed to the knobs directly under the panel.

Select the mode by pressing one of the five Mode buttons. The selected button lights up, so you can always see which mode is currently active.

Each function is right at your fingertips. Each row of the matrix corresponds to a different mode. Select the mode with the Mode button, then select the function with one of the six function keys.

Pressing the function key opens the corresponding page of parameters on the LCD, so that you can edit the values using the knobs. The lamp above the key lights up so you can see the function you have selected. Function keys can also be set to trigger playback of specific samples—allowing you to play samples directly from the front panel.



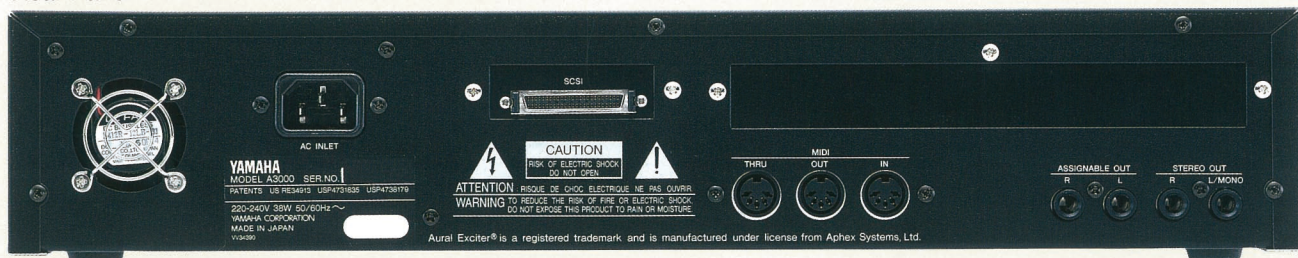
The stereo inputs and the recording-level control are located on the front panel for convenient sample recording.

Use knob 1 to scroll through the pages of functions; use knobs 2 to 5 to input values, to control sound in real time, and more. Each knob includes a push-switch for quick access to even more functions.

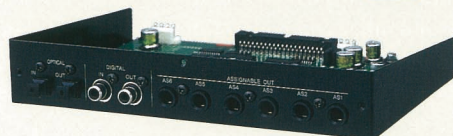
Use these keys to call up frequently used commands, to access assignable features, and to audition the selected sample.

The 2HD/2DD floppy drive makes it easy to back up and reload your sample and program data. With Version 2, you can now save data across multiple floppy disks, and you can save data into AIFF files for export to another device. You can also load AIFF files, WAV files, standard MIDI files (format 0), and other common sampler formats.

Rear Panel



Optional AIEB1 I/O expansion board with 6 ASSIGNABLE OUT jacks, coaxial DIGITAL IN and OUT jacks, and OPTICAL digital IN/OUT ports.



SPECIFICATIONS

Tone Generation	16x oversampling, 16-bit A/D conversion 4x oversampling, 18-bit D/A conversion 64-note polyphony, 16-part multitimbral, Dynamic Voice Allocation														
Dynamic filters	16 dynamic filter types (HPF, LPF with resonance, BPF, BEF, etc.), assignable by sample.														
Sampling Frequency	Analog input 44.1kHz, 22.05kHz, 11.025kHz, 5.5125kHz Digital input (with optional AIEB1 I/O expansion board installed) 48kHz source: 48kHz 44.1kHz source: 44.1kHz 32kHz source: 32kHz 1/2, 1/4, and 1/8 undersampling are supported.														
Sampling RAM	2MB standard (on-board), expandable to 128MB (four 72-pin SIMM* sockets)														
Sampling Time	Maximum sample length: 32MB (mono), 64MB (stereo). Maximum sampling time: 6'20" (at 44.1kHz), 50'43" (at 5.5125kHz).														
Sampling Frequency and Time (Mono/Stereo)	<table border="1"> <thead> <tr> <th></th><th>2MB on-board</th><th>2MB on-board + 32MB (optional)</th><th>2MB on-board + 64MB (optional)</th></tr> </thead> <tbody> <tr> <td>44.1kHz</td><td>23.7"/11.8"</td><td>6'20.4"/3'22.1"</td><td>6'20.4"/6'20.4"</td></tr> <tr> <td>22.05kHz</td><td>47.5"/23.7"</td><td>12'40.8"/6'44.2"</td><td>12'40.8"/12'40.8"</td></tr> </tbody> </table>				2MB on-board	2MB on-board + 32MB (optional)	2MB on-board + 64MB (optional)	44.1kHz	23.7"/11.8"	6'20.4"/3'22.1"	6'20.4"/6'20.4"	22.05kHz	47.5"/23.7"	12'40.8"/6'44.2"	12'40.8"/12'40.8"
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File Compatibility	AIFF (Macintosh) and WAV (Windows) format files, sound data from popular samplers, and standard MIDI files (format 0)														
Effects	Three effect blocks (54 effect types) and 4-band total EQ														
Panel-Play Function	Four control knobs: Assignable MIDI controllers for internal sound and MIDI out Six function keys: Assignable MIDI keys for internal sound and MIDI out														
Easy MIDI Recorder/Player Function	MIDI realtime record/play (for quick song sketch) Standard MIDI File format-0 imported from MS-DOS-format FD														
Front Panel Switches and Connectors	Volume: Master VOL, REC VOL Mode switches: PLAY, EDIT, REC, DISK, UTILITY Function switches: 6 Other switches: COMMAND, ASSIGNABLE, AUDITION Knobs: 5 INPUT (L, R); PHONES; 3.5" floppy disk drive (2HD/2DD)														
Rear Panel Connectors	STEREO OUTPUT (L/MONO, R), ASSIGNABLE OUTPUT (L, R), Optional hardware slot x 1; SCSI interface (50-pin half pitch x 1); MIDI (IN, OUT, THRU)														
Optional Hardware (User-installed)	AIEB1 I/O expansion board (6 assignable outputs, coaxial digital IN/OUT, optical digital IN/OUT) Accepts 2 or 4 SIMMs (72-pin; 70ns or faster; parity or non-parity; 4, 8, 16, or 32MB [in equal-sized pairs]) Accepts 3.5" internal hard disk.														
Dimensions (WxDxH)	483 x 403 x 90 mm (19" x 15-5/8" x 3-1/2")														
Weight	6.9kg (15.2 lb.)														
Included Accessories	Five floppy disks (Demonstration and Sound Introduction) CD-ROM (Sound Data and Sampling Audio from AMG)														

*Before purchasing expansion SIMMs, please refer to the A3000 Version 2Guide for important information about SIMM compatibility.

Specifications subject to change without notice.

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