

ALESIS

A6 Andromeda 16-Voice Real Analog Synthesizer



Frequently Asked Questions

The Alesis A6 Andromeda Real Analog Polyphonic Synthesizer is the single most powerful polyphonic analog synthesizer ever built. Using Alesis proprietary analog ASIC technology it delivers classic true analog sound, combined with state-of-the-art digital and analog effects and a powerful realtime control interface.

1. **What is the A6 Andromeda?**
The **A6 Andromeda** is a new 16-voice polyphonic real analog synthesizer from Alesis.
2. **What is the difference between an analog synthesizer and a virtual analog synthesizer?**
There is no such thing as a "virtual analog" synthesizer. There's only black or white but black will never be "virtually white". Synthesizers are either analog or digital. So-called "virtual analog" synthesizers use digital signal processing (DSP) to emulate the sound of real analog synthesizers, whereas real analog synthesizers use only analog circuits to create and modulate the sound.
3. **Why is analog better than digital?**
It is hard to say, if analog is generally better than digital. That depends on the sound you are looking for. However, analog synthesizers will always sound more authentic than their digital counterparts. A digital emulation will never be a 100% image of the real analog sound. There are many sonic and technical details that prove this.
4. **Why are there so many virtual analog synthesizers out there and only a very few new real analog synths?**
It is very simple to make a "virtual analog" synth. All you need is an off-the-shelf Motorola DSP and a smart programmer who knows C++ programming language. That's why there are so many of them, either in hardware or as software plug-ins. However, building a real analog synth is expensive and takes a lot more research and development since many of the core components of vintage analog synthesizers are no longer available.
5. **What will keep other manufacturers from also building a real analog synthesizer?**
The Alesis **A6 Andromeda** uses custom Alesis ASICs (Application Specific Integrated Circuits) to create the sound. This is 21st Century technology, used to create the warm and vivid sound of a now historic instrument. It took over three years and a lot of money to design these custom ASICs. Only a very few companies in this industry have the technical resources for this type of custom design. Even if some of the other companies would decide to make their own ASICs, it would probably take them years to bring out a comparable product like the **A6 Andromeda**.
6. **If the A6 is analog, how does it save its programs and allow for MIDI control?**
The **A6** uses a very powerful main microprocessor to translate the analog knob moves from the front panel and translate them into digital code that can be saved to memory. This code is then converted back to analog control voltages that shape the sound coming from the analog ASICs.
7. **How many voices does the Andromeda have?**
16 voices. All real analog.
8. **How many oscillators per voice?**
There are two oscillators per voice with 5 waveforms each and two suboscillators, one octave below the frequency of the main oscillators.
9. **How many filters per voice?**
There are two filters per voice. Also real analog and with resonance.
10. **What's the difference between Filter 1 and Filter 2?**
Filter 1 is a 12 dB, 2-pole multimode filter with lowpass, highpass, bandpass and notch characteristics. This filter is similar to the legendary Oberheim SEM filter. Filter 2 is a 24 dB; 4-pole fixed lowpass filter in the tradition of the modular MOOG synthesizers of the late 60s and 70s.
11. **Can it be used as a vocoder?**
Not really, but the filters and modulation engine allow for very interesting vocal-like sounds.
12. **Do the knobs send continuous controllers?**
Yes, the knobs will send continuous MIDI controllers.
13. **How many knobs are on the front-panel of the A6?**
The **A6** has 72 knobs, which is more than any other pre-configured non-modular synthesizer ever made. In addition, there are a total of 144 buttons. And these controls do only represent a part of the parameters that make up one single sound.
14. **Do I need so many knobs if I have a graphic LC-Display?**
Having dedicated knobs for all major functions and a large graphic LC-Display is the best of both worlds for anyone who is playing or programming the **A6**. While the knobs allow for the most flexible realtime control during programming or in live performances, the graphic display gives the user a complete overview of all parameters in the section that is currently edited. The display is automatically updated whenever a different section is called up by one of the knobs on the front panel. In addition, eight soft-knobs underneath the display give direct access to all associated parameters, including those that don't have a dedicated knob on the front panel.
15. **Does the Andromeda have effects, too?**
Yes, there's a digital and an analog effects section. The digital section offers chorus, flanger, delay and reverb effects, plus many more in various configurations. On the analog side, we have real analog distortion (great for those acid techno sounds, or for any guitar-like lead sound).
16. **How good are the effects?**
Let's just say we're using the most powerful effects engine we currently have, plus the best reverb algorithms we've ever made. There will be people out there using the audio inputs of the **A6 Andromeda** just to get access to these effects with their external sources.
17. **How does the analog effects section work?**
In the analog effects section, you can find analog distortion with four different colors (EASY, LIGHT,

- HEAVY AND KILLER). There are independent input and output level parameters.
18. **Can I combine analog distortion with digital effects?**
Yes, you can. From the analog distortion output, the signal can be sent either straight to the main outputs or into the digital effects processor (using either the DFX1 or DFX2 bus). If the digital effects algorithm is a multi-effect, the signal can have either all or just the last effect in the chain (usually a reverb).
 19. **Can I connect my analog sequencer or controller to the A6 Andromeda?**
Yes, you can, the **A6** has analog CV inputs to the oscillators and filters, allowing you to connect some of your precious vintage controllers to the **A6**.
 20. **Can I run external signals into the A6 Andromeda?**
Yes, you can. There are external audio inputs that go directly to voices 15 and 16's filters, plus there is a "Voice 1-16" input that allows you to run an external signal through the filters of all 16 voices and control these from the keyboard in order to create exciting multi-bandpass filter effects.
 21. **How many outputs does it have?**
The **A6 Andromeda** has a total of 20 audio outputs. Two main and two aux outputs are used for multiple voices, either with or without effects. In addition, the **A6** has 16 separate voice outputs, grouped in pairs on standard 1/4" TRS jacks.
 22. **How do I send a single sound to a single output?**
First of all, you need to understand that the single outputs are per voice, not per channel or sound. However, each program can be set up to use just a single voice (MONO) and then directly assigned to one of the 16 voices. It might be a good idea to program specific monophonic sounds (like bass or lead sounds) to always use the same voice. On the contrary, polyphonic sounds should be programmed with VOICE OUTPUT turned off, to avoid random bleeding of sounds into the voice outputs.
 23. **Does it have an arpeggiator?**
Yes, it does. And every sound in a mix can have it's own pattern. And they can all play in sync.
 24. **Does it have a sequencer?**
Yep. An analog style step sequencer. And every sound in a mix can have it's own sequence. And they can all play in sync.
 25. **Can I connect it to my computer-based sequencer or software editor?**
Yes, you can. The **A6 Andromeda** offers full MIDI control. You can use your librarian software for archiving your work.
 26. **But aren't analog synthesizers very sensitive to temperature in terms of pitch drift?**
Yes they are. Just press the AUTO TUNE button and all oscillators and filters are automatically tuned. Plus, there's a smart background tuning function, which automatically re-tunes voices that are currently not in use.
 27. **What is the proprietary Alesis ASIC technology behind the A6 Andromeda?**
Keith Barr designed two new ASICs for the **A6** (get it?) **Andromeda**. One for the oscillators and one for the filters. These are unique analog chips, many times more powerful than any other custom chips ever made for this type of application. If it weren't for Keith's decision to design these ASICs, the **Andromeda** would not exist today. This is the "Alesis Soul" inside the **A6**.
 28. **What kind of realtime controllers does the A6 Andromeda have?**
First of all, there are the familiar pitch bend and modulation wheels. Then there are connectors for three pedals: a sustain pedal, plus one additional switch and CV pedal, which are programmable using the modulation engine. The keyboard has attack and release velocity plus aftertouch. Finally, the **A6 Andromeda** has a custom designed ribbon controller, which can be used in many different ways. Add the 72 knobs on the front panel and you have the most powerful realtime engine in any polyphonic synthesizer.
 29. **What are the envelope generators like?**
They are extremely powerful and versatile. They have dual decay and release stages for more flexibility, variable offset, delay, different curve shapes, and powerful loop capabilities. This is every synth programmer's dream come true. And we have three of them per voice.
 30. **Does the A6 Andromeda have classic ADSR envelopes?**
Yes. You can setup each of the three envelope generators to behave like a classic ADSR envelope, with direct control of Attack, Decay, Sustain and Release from the front panel.
 31. **What is the advantage of having different envelope curve shapes?**
As said before: this is a sound designer's dream come true. It allows for much finer and accurate shaping of envelopes. It makes soft and long attacks sound more natural. It gives sharp attacks more punch. It makes pads fade more naturally. It's almost like shaping your envelopes in clay.
 32. **Can the LFOs be synced to MIDI?**
Yes, they can be synced, either to external MIDI clock or to the internal master clock of the sequencer and arpeggiator.
 33. **How many modulation routes does the A6 Andromeda have?**
We counted a total of 45 independent modulation routes. That's far more than any other synthesizer on the market today. For each route, there's an independent selection of modulation source and modulation destination, level, offset and a

- convenient on/off switch on the front panel for quickly comparing the effects of the modulation.
34. **But isn't it immensely complicated to control these analog ASICs via MIDI or from the front panel?**
Yes, but the **A6 Andromeda** uses an extremely powerful microprocessor (Coldfire) to control the whole engine. This processor allows for smooth and direct realtime control, makes the envelopes lightning fast and guarantees perfect MIDI timing.
 35. **What does the A6 Andromeda sound like?**
Like anything you want, sometimes very familiar and occasionally like nothing you have ever heard before.
 36. **How does the sound compare to a classic Moog, Oberheim or Sequential synthesizer?**
It has something of everything. It can imitate and emulate classic sounds but it also has its own unique color.
 37. **How does the sound compare to a Nord Lead, JP8000, AN1x or Waldorf Q?**
You should do the test.
 38. **Can the A6 Andromeda do more than just classic analog sounds?**
Absolutely yes! It allows you to combine different filters with different envelope settings, making it sound like two totally different synthesizers. The ring modulation and FM creates unique metallic and inharmonic color. The bandpass and notch filters create very colorful and unusual sounds. Finally, in combination with the analog and digital effects you get a couple of million other exciting new sounds.
 39. **Does the A6 Andromeda have multi mode?**
Yes. It has MIX mode, very much like the QS series, with 16 MIDI channels, adjustable volume, pan, keyboard-range, effects send, etc. MIX mode in the **A6** is the performance mode for the dance producer / D.J. You can create completely arranged music with just one **A6**. It's like having 16 Minimoogs, or 2 Minimoogs, 1 ARP Odyssey, 1 Oberheim Xpander, 1 Prophet 5, or....
 40. **How does MIX MODE on the A6 Andromeda work in conjunction with the sequencer and arpeggiator?**
Since every PROGRAM can be saved with its own sequence or arpeggio pattern, a MIX can be a complex arrangement of up to 16 sequences playing simultaneously. Imagine a huge modular synth with 16 step sequencers playing in perfect sync, each controlling its own monophonic synthesizer... (Now breathe slowly...)
 41. **Does the A6 Andromeda support keyboard splits and layers?**
Yes. In MIX MODE, up to 16 programs can be combined as splits and/or layers across the keyboard. For each MIX channel, a separate MIDI channel can be assigned, so if you want 3 MIX channels to receive on the same MIDI channel — no problem!
 42. **How about layers in PROGRAM mode?**
You cannot layer sounds in PROGRAM mode, but you can use "UNISON X" mode to stack oscillators and detune them. This can produce extremely rich timbres with up to 32 oscillators on one key.
 43. **Is the A6 Andromeda software upgradeable?**
Yes. The **A6** operating system is stored in a FLASH memory. Updates can easily be downloaded from the Alesis website as standard MIDI sysex files. There is no need to open the unit or to replace EPROMs.
 44. **Who is the target customer for the A6 Andromeda?**
Anyone who is looking for the ultimate analog sound! Whether he/she is a traditional analog synthesizer enthusiast, a dance/techno producer, a professional live or studio session player.
 45. **What are the main applications for the A6 Andromeda?**
It's the ultimate sound machine for live performance and studio. With its vast selection of sounds it can replace a whole armada of old analog synthesizers or modern so-called "virtual analog" digital synthesizers.
 46. **Will there be a rack-version?**
There are currently no plans for a rack version.
 47. **What's the price point going to be?**
The **A6 Andromeda** will have a suggested retail price of \$3499. This is – in the good tradition of Alesis – about half of what a customer had to pay for any similar analog synthesizer in the past, even though there is and never was anything out there that can compare to the **Andromeda**, thanks to Alesis' own custom ASIC technology.
 48. **But aren't analog modeling digital synthesizers less expensive?**
Yes, some of them are but the **A6 Andromeda** outperforms most of them in every aspect: more knobs, more voices, more powerful voice engine, and let's not forget that it's real analog!
 49. **But how does the price compare to other real analog polyphonic synthesizers?**
At this point, there are only three other real analog polyphonic synthesizers, some of which are not even in production yet. Two of these are 8-voice, one is 6-voice polyphonic. Based on a price-per-voice calculation, the **A6 Andromeda** is about half the price of its competitors. Plus: none of the others has effects; none of these has an onboard step sequencer.
 50. **When is the A6 Andromeda shipping?**
The **A6 Andromeda** is shipping now!

For more information on the Alesis A6 Andromeda visit www.alesis.com