

2. Information

1. Introduction
2. Modulation Matrix
3. A sound
4. MIDI
5. Auto-tune
6. Programs & Packets
7. Envelope Generators & Low Frequency Generators
8. Velocity Controlled Oscillators
9. Filter IN
10. Buying a second hand
11. Famous users
12. Typical serialnumber
13. OS-version
14. Voltage

1. Introduction

The VX600 is a 6-voice programmable matrix analog MIDI-synthesizer that's capable of 6-part multi-timbrality. It was released in 1988 in Europe and the original price was about 1000 EUR. Current second-hand prices are around 600 EUR.

It's quite an underrated instrument. With it's MIDI capabilities and truely analog sound it can easily compete with todays crop of virtual analogue instruments.

The VX600 is also blessed with a connection for the AKAI EVI & EWI instruments.

According to Tim Sintebin who knows an engineer who worked with AKAI during the developements of the synthesizers (AX-60, AX-80, VX-600,...), Akai took the schematics of an Oberheim model and putted that in their case. That's why the VX-600 has the only other synth-engine than the others (ax80, ax60,...).

Thanks to **Senso** the VX600 was introduced to the Netherlands. The importer (Fodor) at that time arranged for 100 VX600's to be imported after the fact that Senso guaranteed that he would buy 50 of them.

2. Modulation Matrix

The VX600 uses a modulation matrix for creating sounds as used in the Oberheim Xpander. There are 10 slots free for modulations. Any of the 16 sources and 31 MIDI controllers could modulate any of the 18 destinations. See the **specifications** for a list of the sources and destinations.

3. A sound

Each sound contains 2 VCO's, 2 LFO's, 3 EG's and 1 VCF. The 2 VCO's share the same VCF. The VCF is a 24db low-Pass with resonance and a 12db high-pass without resonance. Most parameters have 100 steps. So there won't be a glitch of zippernoise. Frequency modulation is also possible where VCO2 modulates VCO1 or VCO1 modulates the VCF. Furthermore, VCO1 can be synced to VCO2.

4. MIDI

The VX600 has got a good MIDI-implimentation but lacks system-exclusive messages. So it won't be possible to use an external MIDI editor. But this won't be really necessary, for editing sounds, since the VX600 has got a big LCD with 8*40 characters (well, it was big in the late eighties). The lack of sys-excl. won't make a MIDI-dump possible. So the only way of backing up your killer-sounds is by using patchsheets. You can find a lot of them at the **patches-section**.

5. Auto-tune

There is an auto-tune function build in, which is really necessary the first 20 minutes after power up. After that the VX600 is reasonably stable. If your VX600 has callibration problems, visit the **hints & tips-section**.

6. Programs & Packets

Once you created your sounds (called sound library patches in Akai-language), you can put them in a program. In Multi Play Mode, a program can contain up to 6 different sounds. Each sound can have it's own MIDI-channel and can be tuned and detuned. You must also assign the number of voices it may use and if it uses them as polyphonic or monophonic voices. Plus you must assign the keyzone. This means that you can put each sound under a different key and thus create your own analog rhythmbox using only percussion & fx sounds, which is MIDI-controlled. The other mode a program can have is Chord Play Mode. This let's you assign 6 different sounds in a chord. 20 chords

can be created and each note can have one of those 20 chords.
20 programs can be stored in a packet. This can be usefull while performing with the VX600 in a live situation where different programs need to be called up in different orders. There are a total of 10 packets to be used.

7. Envelope Generators & Low Frequency Generators

The EG's and LFO's are software generated, but are fast. This means that percussive sounds are no problem. The only thing that bothers me is the resonance. It goes well into selfoscillation and cuts through but when I use it on percussive sounds or on bass sounds there's something missing. It's as if the resonance has a little attack time. This isn't really noticable, but once I compared my VX600 with my Korg Mono/Poly I'd say that the VX600 is better for pad-sounds and fx than for resonating bass sounds. I don't know if all the VX600 have this problem since my VX600 is the only one I have ever heard.

8. Velocity Controlled Oscillators

The VX600 uses CEM3374's as VCO's (the same as used in the Oberheim Xpander). This means that all waveforms can be used at once.

9. Filter IN

There are 2 filter-IN connections. This means that 2 sound sources can be altered individually by the VX600. In the voice configuration, VCO2 will act as the external sound source.

10. Buying a second hand

When bying a second-hand VX600 you must certainly look at the LCD since these tend to lose there brighthness after some years. See the **hints & tips-section** for more info. The other thing to watch out for is the callibration process. If this fails it might indicate a hardware problem. Again see the **hints & tips-section** for more info.

11. Famous users

Rhys Fulber from Front Line Assembly and Delerium used to have one. It was used on the FLA album Tactical Neural Implant.

Roger Linn used one for demonstrating the MPC3000 at the NAMM in 1994.

Front Line Assembly
Pouppée Fabrikk
Luc Van Acker
Mussolini Headkick
David Morley
Stijn

If you know of more famous users, then please **let me know**.

12. Typical serialnumber

Typical serialnumber: 30655-00371

13. OS-version

Most recent OS-version: 1.2

14. Voltage

Voltage currency: 220/240 VOLT-switch