

3. Hints & Tips

1. Reset
2. Display
3. LFO's
4. Calibration Problem
5. Real-time controllers
6. Entering Negative values
7. Sustain
8. Memory cards
9. 13 pin connector
10. Snappier envelopes
11. Need components for repair?

1. Reset

To do a complete initialisation of your VX600, power up the machine while pressing down the '<' and '>' keys.
NOTE: This will erase all your sounds and patches in the machine!

2. Display

The display used in the VX600 and S1000 has a known problem. The backlight will deteriorate after a while. This will make the screen less readable. The backlight also makes a constant buzz, which becomes irritating after a while. See the **Mods section** to build a switch for disabling the backlight.

To solve the problem of an unreadable display you don't need to replace the entire display. You just need to replace the EL-Foil. This is the part of the display that generates the light. You can buy EL-Foils [here](#). This site also tells you how to replace the EL-Foil.

3. LFO's

When you use the LFO and the speed setting at 99. The speed still is kind off slow. To increase the speed, add the following modulation in the matrix:
(KEY GATE) (+99) (LFO-1 SPEED)

you can add this entry multiple times to obtain yet more speed.

LFO 1 is always free running. This means that when you play 6 voices in the same patch the LFO sync will be the same for all voices.
LFO 2 will be reset for a voice when a key gate is detected.

4. Calibration problems

<Menu> + <4> will get you to the calibration screen.
If the VX600 gets stuck while calibrating this might suggest a hardwareproblem. But not always...

I had the trouble that the VCF-calibrations didn't succeed. This was due to the fact that the current sound I used had MIDI-controllers assigned to the VCF-cut off and that these controllers where not set to zero before calibrating. This meant that if, for example M.Modulations controlled the VCF-cutoff and that the modulation wheel was set at value 50, the vcf-calibration would start calibrating the filter as if the current setting was the zero-value. Sometimes the calibration was completed but the sounds didn't sound as they used to be.
One way to get the calibration right after a bad calibration is to **reset** the VX600 and do a recalibration. This always worked for me but it will erase all your sounds. Another way is to power off the VX600 and wait until it is cooled down. Then restart it and do a calibration. Yet another way, when you do not want to wait until the VX600 is cooled down, is to calibrate the machine and always decreasing or increasing the controller that caused the miscalibration a little bit until the zero setting is obtained. You must do this in small steps otherwise the calibration process will fail.

So, always make sure that all your controllers are set to zero before calibrating the VX600.

If for some reason there's a hardware problem you might want to check the SSM2300 IC's. The SSM2300 takes care of the demultiplexing. These are the chips that distribute the analog CV's to the respective inputs on each voice. It might be possible that other VX600's use the CD4051 (xx4051) for demultiplexing. There are about 8 of them. These are placed in sockets so it should be easy to remove them. Try to switch them from socket to find out if one of them is faulty. Another hardware problem can be due to the fact that the opamps are faulty. these will be TLO82's or TLO84's (dual & quad opamps).

5. Real-time controllers

The VX600 doesn't have a lot of dedicated real-time controllers. The only one are the keyboard with it's velocity and after-touch.

But it is possible to use the Bend-button to control for example the cut-off.

Add in the Mod.Matrix following line:

(EW.BEND) (+50) (CUTOFF)

Strangely enough it is not possible to use the other buttons (Glide, Breath and Vibrate) as real-time controllers.

Another way of using real-time controllers are the Pedal-inputs located at the back of the instrument. See the **Help Me** section if you know the ohm-value of these inputs so that I could add a button that controls this input.

6. Entering negative values

Entering numbers using the numeric pad.

Press 'enter' to toggle between negative values (when possible). Suppose you want to change the coarse tuning from -24 to +24: go to the appropriate field ('-24') and press 'enter'.

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7. Sustain

Editing an envelope that has both decay values set to a non-zero value doesn't have sustain. If you want the envelope to produce a sustain, make sure the decay 2 setting is set to '--' (You will get this by moving the alpha-dial beyond the '99' value).

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8. Memory cards

Akai suggests the Akai BR-16 memory cards to expand the VX600's memory. Those cards are no longer available from AKAI but have been replaced by a model, which should be compatible with the VX600. The BR-32 card. But a ROLAND 16K card or 32K cards will work as well with the VX600 (e.g. the Roland M-256E memory card).

The Akai BR-32 card contains 32K bytes of expanded memory for your VX600. This will contain 2 banks each containing 50 sound library patches, 20 chord memories, 40 programs and 10 packets.

To switch between banks go to Packet (<MENU> + <0>) and use Soft Key 6.

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9. 13 pin connector

The 13 pin connector is used to output the 6 voices individually. It's the same connector as used by Atari for their ST Monitor range.

You can still get the connector from **Digi Key**, part #: CP-1013-ND in the US and from **www.vintageplanet.nl** in Europe.

You can find the connections **here**.

Or you can create your own **individual outputs**.

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10. Snappier Envelopes

The Envelopes can be made snappier by using negative values in the EG. The Attack time will then have the function of the decay time.

Just set the amount of the EG to -99 in the matrix.

For example: EG1 -99 VCF

That way you'll get faster attack times.

This hint was submitted by **Antti Pitkämäki**

11. Need components for repair?

A good source for vintage VX600 components is **www.vintageplanet.nl**

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