PRODUCT FEATURES

- Doepfer DIY Synth euroack module conversion solution
- Extremely easy and straighforward assembly, no DIY skills necessary at all
- Self-contained analog monosynth voice
- Seven essential submodules that can be used independently
- Normalled breakable connections, MS-20 style
- 30 patching points

TECHNICAL DETAILS

- Eurorack standard synthesizer module, fully Doepfer compatible
- 42 hp wide
- +12/-12V powered
- Current draw: 170 mA



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SALUT

Thank you for purchasing the Xaoc Devices product. The purpose of developing the Karl Marx Stadt was to provide a super easy to implement, compact solution to convert the ever popular Doepfer DIY Synth board into an eurorack module. No DIY skills are necessary, as there's no soldering or wiring needed at all.

The KMS+DIY Synth combo is the most economically effective

and rewarding entry solution for modular beginners. All the essential functional blocks are provided so you can learn the subtractive synthesis basics but it is also a great addition to more advanced systems as well. Thank you, Dieter!

ASSEMBLY & INSTALLATION

The Karl Marx Stadt unit needs the Doepfer DIY Synth board to work, it is sold separately. If you have bought a bundle, chances are that the dealer has already mounted the board for you. If not – the installation is extremely easy and straightforward, just please read the following steps carefully to avoid problems.

- 1. If your DIY Synth is equipped with a tempco, unplug its cable from the onboard socket.
- Plug the tempco connector in the respective socket ① on the back on the KMS unit. It is located to the left of the power header ②.
- 3. Now, push the DIY Synth

on all the headers 0, very gently. Observe the goldpins carefully to avoid bending them. Please pay an extra attention to the single +5Vgoldpin 0.

- Clear 42 hp space in your cabinet and turn the power off. Now plug in the ribbon cable

 to the bus board, observing the red stripe orientation. It indicates the −12V rail on the module (dot mark)
 - **CAUTION!** Unlike the other Xaoc modules, the KMS is **NOT** secured against reversed power connection!
- 5. Mount the screws and turn your system back on. The slider LEDs should light up. The KMS is ready to go!







CONTROLS & OPERATION

The panel has been laid out in most obvious monosynth style manner. We took advantage of all the internal patchpoints provided by Doepfer. Also, there are normalled connections made behind the panel so you can use the KMS as a selfcontained analog synth voice without even plugging any patch cables in. These fixed connections are marked by with respective function typed within the BLACK BOXES. Of course, the real fun starts when you break them by simply patching anything into their respective input jacks.

The synth consists of 7 modules: VCO ①, LFO ①, VCF ①, VCA ①, ADSR ①, slew limiter ② and inverter ③. All of these can be used independently. For further information, please refer to DIY Synth's own manual.

MODIFICATIONS

We've made some minor mods to the application suggested by Doepfer. Fixed VCF outputs are now mixed in different configuration and the VCA offset can be adjusted by the trimpot on the back.

By design, the VCF resonance is provided by feeding the output back in. We found it fun to actually open up the feedback loop for routing the signal outside (any output) and back (RES FDBCK IN socket **①**). Now, you can obtain some interesting results with external treatment through effects, filters, etc. Happy experimenting!