OSTANKINO

SEQUENCE COMMANDER II

Model of 1965

OPERATOR'S MANUAL rev. *1965/X/2.3*

SALUT

Thank you for buying this Xaoc Devices product. Ostankino II [ˌɔstanˈkinɔ] is an expander for the Moskwa II sequencer module. It greatly augments Moskwa II's connectivity giving the user the ability to use CV to change most parameters. Ostankino II also adds quite a few outputs including access to the Leibniz Binary Subsystem.

INSTALLATION

The module requires 8hp worth of free space in the Eurorack cabinet. Always turn the power off before connecting the module. **DO NOT CONNECT THE MODULE TO THE POWER BUS!** *Instead, use the supplied ribbon cable to connect Ostankino II to a Moskwa II module. The 16-pin expander connector is marked on the back of the Moskwa II module. Pay close attention to the cable pinout and orientation. The red stripe should match the dot on both modules. The module should be fastened by mounting the supplied screws before powering up. To better understand the device, we strongly advise the user to read through the entire manual before using the module. Please note that Ostankino II is not compatible with the first Moskwa module.*

MODULE OVERVIEW

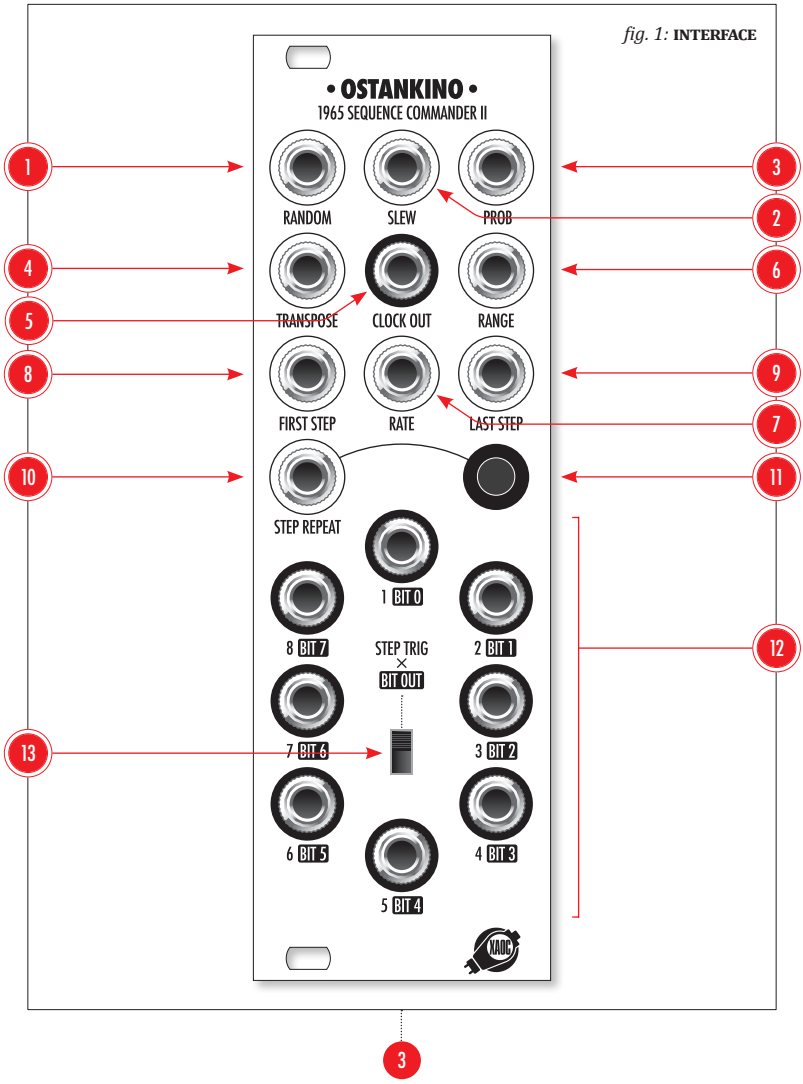
There are ten sockets in the upper half of the panel: nine inputs and one output (fig. 1).

The first row features inputs for the **RANDOM** *(random play)* ❶, **SLEW** ❷, *and* **PROB** *(probability)* ❸ *parameters of Moskwa II.*

In the second row, there is a **TRANSPOSE** ❹ *input (quantized to semitone steps, 1V/oct, +/-5 octaves, transposition takes place before quantization; therefore, the* **TRANSPOSE** *input affects pitch values within the quantization scale set in Moskwa II), internal* **CLOCK OUT** ❺, *and CV input for the* **RANGE** *parameter* ❻.

The middle input in the third row allows the user to control the internal clock's **RATE** ❼ *with continuous voltage (with no external clock patched into the* **EXT CLOCK** *input) or change the division/multiplication settings (with an external clock patched into the* **EXT CLOCK** *input). The left and right inputs control the* **FIRST STEP** ❽ *and the* **LAST STEP** ❾ *of the sequence respectively. The* **LAST STEP** *input adds offset to the value set by the* **RESET** *knob on the connected Moskwa II unit in 1V increments, i.e. 1V moves the last sequence step setting by one position. At 0V there is no change to the sequence length. Negative voltage shortens the sequence, positive voltage lengthens the sequence with the starting point defined by the position of the* **RESET** *knob. We have added the* **FIRST STEP** *input so the user could modulate the first step as well. Voltage in the range +/-10V moves the first step in a circular motion. To move it to the last (eighth) step, one needs 7V (1V per step).*

fig. 1: **INTERFACE**



With careful planning (attenuating and offsetting the incoming CV) one can move the shortened sequence around, which greatly enhances Moskwa II's already vast sequence mangling functionality.

The fourth row deals with one function only. The **STEP REPEAT** ⑩ *input and button* ⑪ *control the step repeat function. When the button is pressed and held, or the input receives a gate, the currently active step is repeated until the button is released or the gate at the* **STEP REPEAT** *input is low.*

All inputs accept CV in the +/-10V range. The exact range of voltages needed to sweep the full range of the parameter depends on the position of the knob on the connected Moskwa II unit. For example, with the **RATE** *knob set in the middle position, a +/-5V LFO will sweep the whole range. On the other hand, with the knob set at minimum, one would need a 0-10V signal to sweep the entire range.*

The bottom half of the front panel is occupied by eight **STEP TRIG/BIT OUT** *outputs* ⑫ *and respective switch* ⑬*. Their functionality is explained in the section below.*

OUTPUTS 1-8

The eight **STEP TRIG/BIT OUT** *outputs correspond to the Moskwa II sequence steps 1-8. The switch alternates between gate output and bit output modes. In the gate output mode, the outputs send gates for the corresponding steps 1-8. When the step is inactive, there is no signal at its corresponding Ostankino II output 1-8 (depending on the setting on the Moskwa II module). The outputs send voltages within the range of 0-5V.*

In the bit output mode, outputs 1-8 assume a very different role (see: "Expandability: Leibniz Subsystem" section below).

EXPANDABILITY: CHAIN MODE

When two Moskwa II units are chained together, the Ostankino II expander controls only the one to which it is connected. Also, the **CLK, STEP TRIG,** *and* **BIT OUTPUTS** *correspond to the parameters of the Moskwa II module to which the Ostankino II expander is connected.*

EXPANDABILITY: LEIBNIZ SUBSYSTEM

At the bottom of the back of the module, the user will find a 10-pin connector for the Xaoc Leibniz Binary Subsystem (see: fig. 2). It sends CV set by Moskwa II's potentiometer but converted to 8-bit values for further processing, e.g. by Xaoc Drezno module. The signal present at the Leibniz Binary Subsystem connector depends on the position of the **STEP TRIG/BIT OUT** *switch on the front panel.*

With the switch set to the **STEP TRIG** *position, the Leibniz connector outputs gates for each sequence step consecutively.*

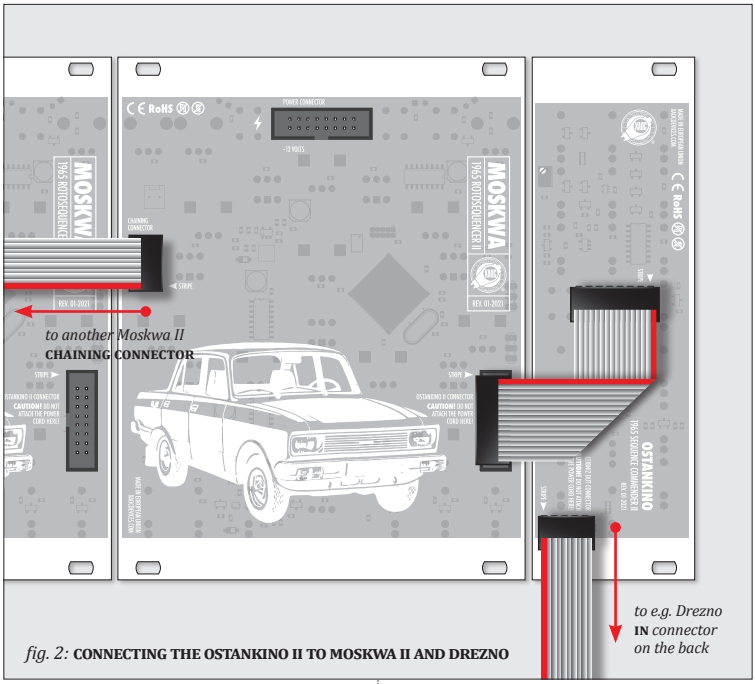


fig. 2: **CONNECTING THE OSTANKINO II TO MOSKWA II AND DREZNO**

With the switch set to the **BIT OUT** *position, each Ostankino II bit output (both on the panel and the Leibniz connector) sends a digital value (on/off) of the bit corresponding to the CV set for the currently active sequence step. Starting with the least significant bit at output 1 (bit 0) and ending with the most significant bit at output 8 (bit 7). The values present at the outputs change when the sequence is advanced to the next step to reflect the currently active sequence step. The bit output mode is especially suitable for use with the Xaoc Devices Leibniz Binary Subsystem, but it will work with any module accepting voltages in the range 0-5V.*

ACCESSORY

Our Coal Mine black panels are available for all of Xaoc Devices modules. Sold separately. Ask your favorite retailer. •

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MAIN FEATURES

Voltage control over Moskwa II parameters:

Random, slew, probability, transposition, range, first and last step inputs

Step repeat CV input and button

Internal clock output

Individual gate/ trigger outputs for each sequence step

Bit outputs for each sequence step, fixed connection with Leibniz Binary Subsystem

TECHNICAL DETAILS

Eurorack synth compatible

8 hp, skiff friendly

Current draw: +10 mA / -0 mA

Reverse power protection