АЧР SYNTHESIZERS

PolyRhythm

Dual Analog Filters + Phaser

User's Guide

PolyRhythm – dual analog filter + phaser box. It has two voltage controlled filters and a low-frequency oscillator made from authentic Soviet components. It has 8 knobs, 5 switches and 2 buttons with which you can control the parameters of the sound. Both filters are made of components and circuitry in accordance with well-known Soviet synthesizers, produced in the USSR back in the 1980s.

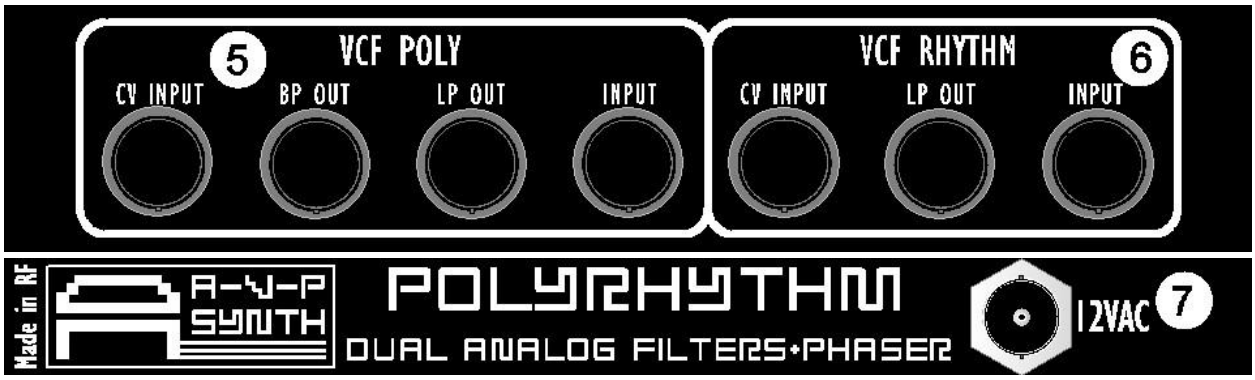
Specification

- *Method of signal processing*: Analog
- *Voltage Controlled Filters (VCF)*: two types - POLY and RHYTHM
- *The low frequency oscillator (LFO)*: one - triangle
- *Audio inputs*: two; mono jack socket for 6.3mm
- *Audio outputs*: three; mono jack socket for 6.3mm
- *CV inputs*: two; mono jack socket for 6.3mm
- *Controls*: 8 knobs, 5 switches
- *Plastic black box*
- *Power supply*: 12V AC power adapter (supplied)

Controls

Front panel

Rear panel



1- The power switch and a light indicator (POWER);
2- Voltage-controlled filter VCF RHYTHM: input level regulator (LEVEL IN), the cutoff frequency (CUTOFF), resonance (RESO), BYPASS switch;
3 - Voltage-controlled filter VCF POLY: input level regulator (LEVEL IN), the cutoff frequency (CUTOFF), resonance (RESO), BYPASS switch;
4 - Low-frequency oscillator LFO: speed regulator (SPEED), depth of the LFO (DEPTH), RHYTHM and POLY low-frequency oscillator switches;
5 - VCF POLY: control voltage jack input (CV INPUT), band-pass (BP OUT) and low-pass filter outputs (LP OUT), input signal jack (INPUT);
6 - VCF RHYTHM: control voltage jack input (CV INPUT), low-pass filter output (LP OUT), input signal jack (INPUT);
7 - Power adapter jack (12VAC).

Connecting the PolyRhythm

You need to connect the power supply and audio cables to your **PolyRhythm**.
Power supply (12V adapter): connect the included power adapter to the **12VAC** jack;
Audio input (6.3mm jack): insert the mono jack 6.3 mm connector to the right **INPUT** in order to connect **PolyRhythm** to the signal source;
Audio output (6.3mm jack): insert the mono jack 6.3 mm connector to the **LP OUT** or **BP OUT** of the **PolyRhythm** in order to connect to a mixing console or other audio equipment;
CV input (6.3mm jack): connect to the needed **CV INPUT** in order to control the cutoff frequency.

Powering on the PolyRhythm

Set the POWER switch to On, LED indicator will light up.

Overview of controls

In its structure, **PolyRhythm** contains two analog filters which are voltage-controlled (VCF) and one low-frequency oscillator (LFO).
Each filter has an input level control (LEVEL IN), the cutoff frequency (CUTOFF) and resonance (RESO). In addition, each filter has a BYPASS function. Filters can be connected to one another in any sequence, i.e. the output of one of the filters can be connected to the input of another to thereby provide various filtering options.
Note: BYPASS function does not work with a band-pass filter (BP OUT) section of the VCF POLY.
LFO has a speed regulator (SPEED) and depth (DEPTH) modulation. It can be used to modulate the filter(s) to obtain variety of effects - from «wah-wah» to «phaser» effects.

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