



AWP SYNTHESIZERS

COSMWAVE FX

Multi-effects

User Manual



COSMWAVE FX is a multi-effects processor consisting of three separate effects - phaser, delay and flanger, which can be used separately as well as combined in this order: Phaser → Flanger → Delay.

Each unit is hand-assembled in Moscow, Russia.

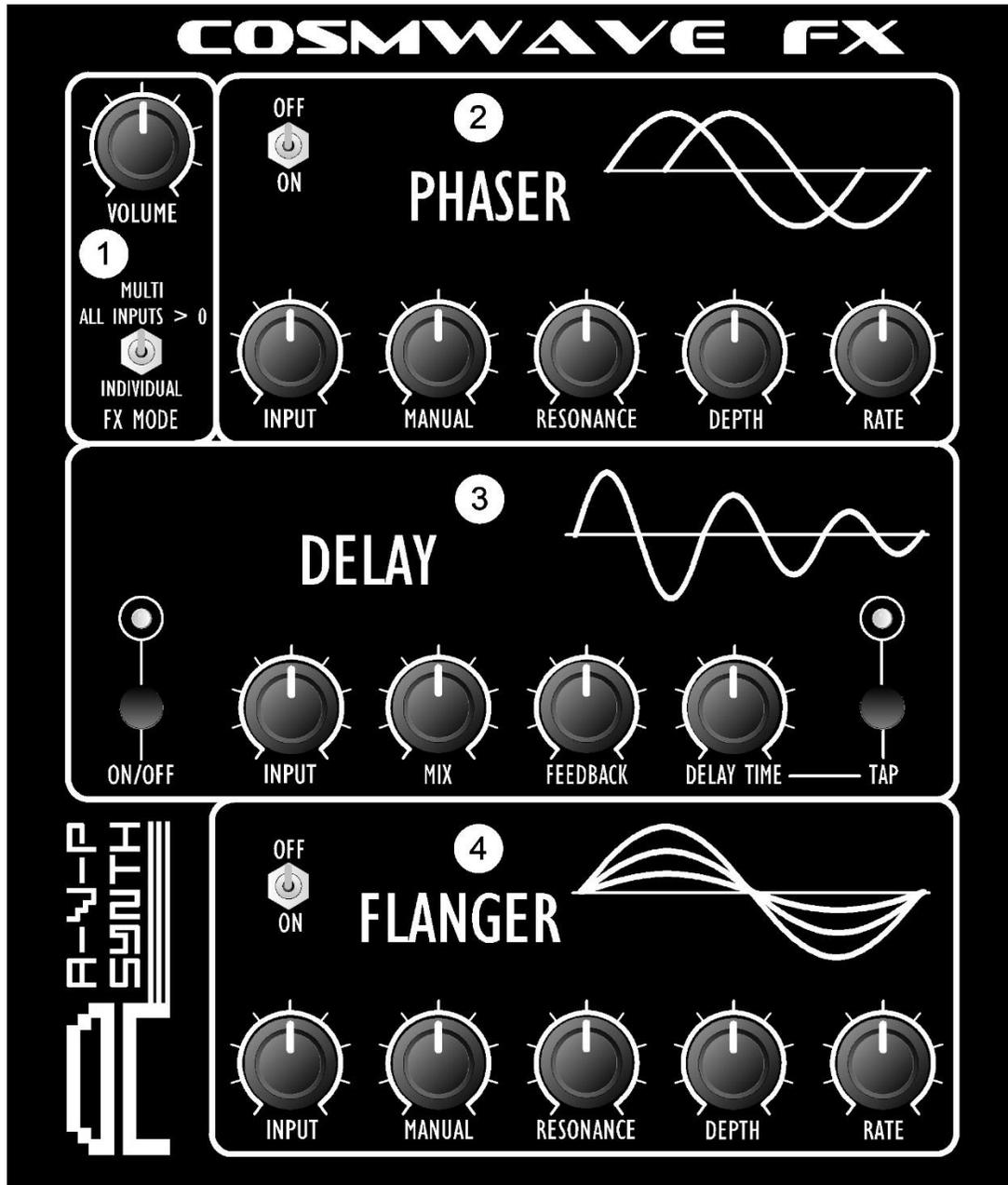
SPECIFICATIONS:

- 1 analog phaser, 1 analog flanger and an analog/digital delay with up to 1 minute of feedback time;
- Each effect can be used separately **INDIVIDUAL** as well as in a series **MULTI** in this order:
Phaser → Flanger → Delay;
- Nine 6.3 mm connectors on the back, three for each of the effects - one input and two outputs;
- Input signals in each of the effects are linear, mono. All effects have a pseudo-stereo output;
- CV inputs for the **MANUAL** knob control in the Phaser and Flanger sections;
- Assembled using discrete components;
- Durable metal case with wood sides;
- Weight: 2 kg.
- Dimensions: D22xW19xL10 cm
- 15 V AC euro type adapter included.

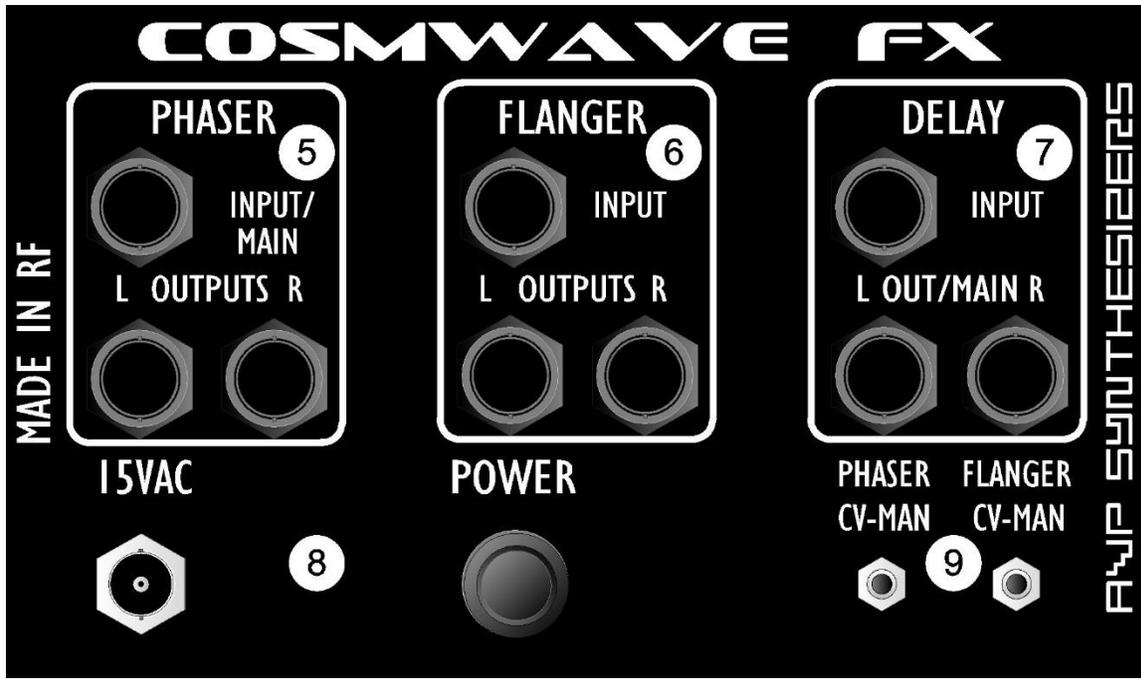
Attention! Please be aware that, due to Cosmwave FX consisting mostly of analog circuitry, there is a certain level of tolerable noise present in the audio. This should be no surprise as most analog effects have this.

CONTROLS

Front panel



Rear panel



① **VOLUME** control and **FX mode** section.

The front panel has a volume control knob **VOLUME** that works as a total volume control for all sections when turned on (Phaser → Flanger → Delay). When you connect each effect separately, the **VOLUME** knob works only as a volume control for the DELAY effect.

An **FX MODE** toggle switch allows you to select one of the two modes:

- ❖ **MULTI** - all effects are switched in series;
- ❖ **INDIVIDUAL** - each effect is connected separately.

To use **COSMWAVE FX** in **MULTI** mode, you must first connect a mono source to the **INPUT / MAIN** jack in the **PHASER** section on the back of the instrument and the output to the **L OUT / MAIN R** jacks in the **DELAY** section. The **FX MODE** switch must be set in the **MULTI** position in order for all the sections to work together.

Note: in **MULTI** mode, all three **INPUT** knobs must be set above 0, if at least one of the **INPUT** knobs is set to zero, there will be no sound at the **COSMWAVE FX** output! However, You can turn the sections on and off for the combination of effects.

To use **COSMWAVE FX** in **INDIVIDUAL** mode, each of the effects need to be connected in a standard way - the inputs and outputs in each section are connected respectively to the signal source and mixer or amplifying device. The **FX MODE** switch must be set in the **INDIVIDUAL** position in order for the sections to work separately from each other.

② PHASER section.

Fully analog effect, therefore it has a permissible level of analog noise at the output.

Note: the noise level depends on the position of the adjustment controls.

The phaser consists of 8 stages and a low-frequency oscillator, which modulates all 8 stages by a triangular waveform (instead of LFO, you can use the **MANUAL** knob to modulate the stages manually).

Phaser section has 5 controls:

- ❖ **INPUT** - sets the input signal level;
- ❖ **MANUAL** - allows you to manually adjust the tone (stages) of the effect;
- ❖ **RESONANCE** - adjusts the saturation of the effect;
- ❖ **DEPTH** - adjusts the depth of the phaser modulation;
- ❖ **RATE** - adjusts the frequency of the phaser modulation.

There is a **toggle switch** to turn the unit on/off (bypass)

③ DELAY section.

A hybrid effect with the path of the direct signal being analog while the delay line is a digital microprocessor. The delay time can be adjusted from 0 to 2 sec with a feedback time of over 1 minute.

Delay section has 4 regulators:

- ❖ **INPUT** - sets the input signal level;
- ❖ **MIX** - amount of effect applied to the direct signal;
- ❖ **FEEDBACK** - adjusts the number of times a delayed signal is repeated;
- ❖ **DELAY TIME** - adjusts the delay time of the signal.

The **TAP** button allows you to manually set the delay time.

The **LED** above the **TAP button** indicates the delay time.

ON / OFF button - to turn the unit on/off (bypass)

④ **FLANGER** section.

Fully analog effect based on the BBD delay lines.

The flanger consists of a BBD delay line and a low-frequency oscillator (instead of an LFO, you can use the **MANUAL** knob to modulate manually).

Flanger section has 5 controls:

- ❖ **INPUT** - sets the input signal level;
- ❖ **MANUAL** - allows you to manually adjust the tone of the effect;
- ❖ **RESONANCE** - adjusts the saturation of the effect;
- ❖ **DEPTH** - adjusts the depth of modulation of the flanger;
- ❖ **RATE** - adjusts the frequency of the flanger modulation.

There is a **toggle switch** to turn the unit on/off (bypass)

⑤ INPUT and OUTPUTS of **PHASER**.

⑥ INPUT and OUTPUTS of **FLANGER**.

⑦ INPUT and OUTPUTS of **DELAY**.

⑧ **POWER** section.

⑨ **CV**-control of the Manual function in **PHASER** and **FLANGER**.

WARRANTY

The standard warranty on **COSMWAVE FX** is for one year from the date of purchase.

1. The warranty does not apply in the following cases:

- Expiration of the guarantee (after one year from the date of purchase); After-guarantee servicing is possible with additional charges;
- There is any mechanical damage to the inside and/or outside of the unit;
- There are signs of opening or self-repair;
- A malfunction caused by self-updating software, or installing additional options/mods;
- A malfunction caused by damage of the product by other objects and liquids, as well as results of fog, rain and snow.

2. The guarantee does not apply to:

- Adapter;
- Controls if their failure was caused by normal wear or contamination during use.

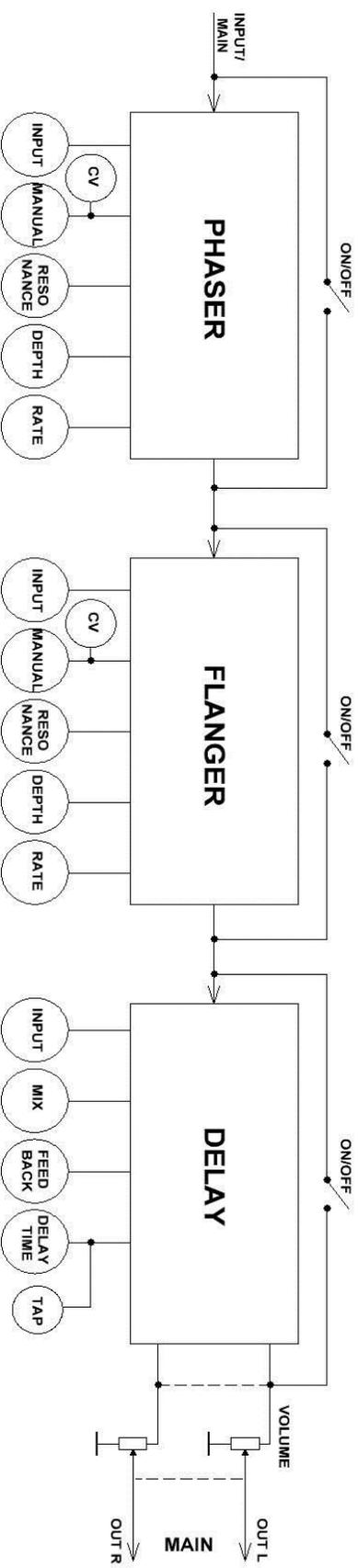
The shipping costs both ways are at the expense of the Buyer.

AVP SYNTHESIZERS



COSMWAVE FX (BLOCK DIAGRAM)

MULTI



INDIVIDUAL

