

SM800 WOBLA: User's guide

Thank you for purchasing an SSSR Labs module! We wish you have fun and creativity with this module. On pages of this manual, we will explain how to use the SM800 WOBLA.

The SM800 is a simple analogue slider controller with three selectable modes of operation

Warning!

Do not connect any voltage or current sources that are not intended to be used as musical instrument sound or voltage control outputs to the unit's inputs/outputs! Although this module has 1 kOhm output resistance, protecting it from any reasonable misuse, connecting low-impedance current sources such as power sources of any kind can cause damage to the unit. Under no circumstances do not put the AC Line power, lightning rod, Tesla coils, defibrillators, electro-shockers and Thor's fingers to the input.

Not observing the above instructions cancels the warranty!

CONNECTING THE UNIT

The unit is equipped with a 10-16 pin Eurorack power cable. Due to its small size, the unit has a non-keyed power connector and has no reverse current protection, so you must make sure that the -12 V line is physically connected to pins 1-2 (heading the edge of the circuit), marked with the **RED STRIPE** label.

THE THEORY OF OPERATION

This function of this module is quite straightforward: it converts position of the slider (or fader, if you wish) into Control Voltage at the output, and do this in three modes of operation. This way it can be used as a CV offset generator for other modules, and/or as performance control element. An array of such sliders may be a useful control zone for a large Eurorack system.

CONFIGURATION HEADER

At the back side of the unit, you can see a 6-pin header with two jumpers. They define direction of the slider. At factory, they are placed in position that corresponds with the front panel and expected way of installation. So, on SM800a these jumpers will be at Desktop position, and on SM800b they will be at Upright position. If you need to install the module upside-down, or make it work upside-down, you always can reconfigure it later.

MODE SWITCH

The switch selects the operation mode. There are three modes expressed as different states of the fish.

1. Half-wobla: Output CV range is from 0 to +5 Volts. This is the default position, which fits digital modules such as SSSR labs KOTELNIKOV oscillator, covering the full 5 V control range.
2. Whole wobla: Output CV range is from 0 to +10 Volts. This range double the previous and fit as a full-sweep positive offset for analogue modules.

3. Two-headed wobla: Output CV range is from 0 to approx. 5.7 Volts with maximum output at the center position, and zero at both edges. It should be said that in this mode the output is not linear, but more like a bell-shaped, so in the middle third of the slider travel, it will operate just narrow range, close to the maximum output. This mode is intended for performing so called wobbles (repetitive timbre sweeps) in a very fast and predictable manner. So, it fits perfectly to wave shapers, VCA, VCF and other modules affecting the sound articulation.

WHY THE FISH?

Wobla (or vobla) is a traditional alias for Caspian roach. In Russia, other countries of the former Soviet Union and parts of Eastern Europe, this and related species of roach are commonly air-dried and salted to create a popular beer snack. The English word wobbler is consonant to Wobla and generally used in Russian EDM scene as the slang term for wobbling technique widely used in hard house, drum & bass, dub step and related music styles.

Technical specifications

- Slider travel length: **60 mm**
- Mode 1 characteristics and range: **Linear; 0...+10 V**
- Mode 2 characteristics and range: **Linear; 0...+5 V**
- Mode 3 characteristics and range (k: position, $0 \leq k \leq 1$; a=23): **Parabolic: $a(k-k^2)$; 0...+5.7...0 V**
- Module width: **3 hp**
- Module depth: **23 mm**
- Dimensions: **15×129×38 mm**
- Weight of the assembled module (inc. power cable and screws) /Boxed: **41g / 118 g**
- Current draw (+12v): **4 mA**