

OBEY Manual



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General Info

OBEY is a dual-function module: one half envelope follower and one half attenuverter / offset generator.

Envelope Follower:

The OBEY takes an audio or CV signal and uses it to trigger an envelope or gate for use in a Eurorack system. It is designed to work with a wide variety of input levels: plug a Eurorack module, passive microphone, piezo, guitar, drum machine, Game Boy into your Eurorack system.

Attenuverter / Offset Generator:

Attenuvert your voltage sources up to two times in the positive or negative! The offset generator provides up to 5 volts in the positive or negative.

Specifications:

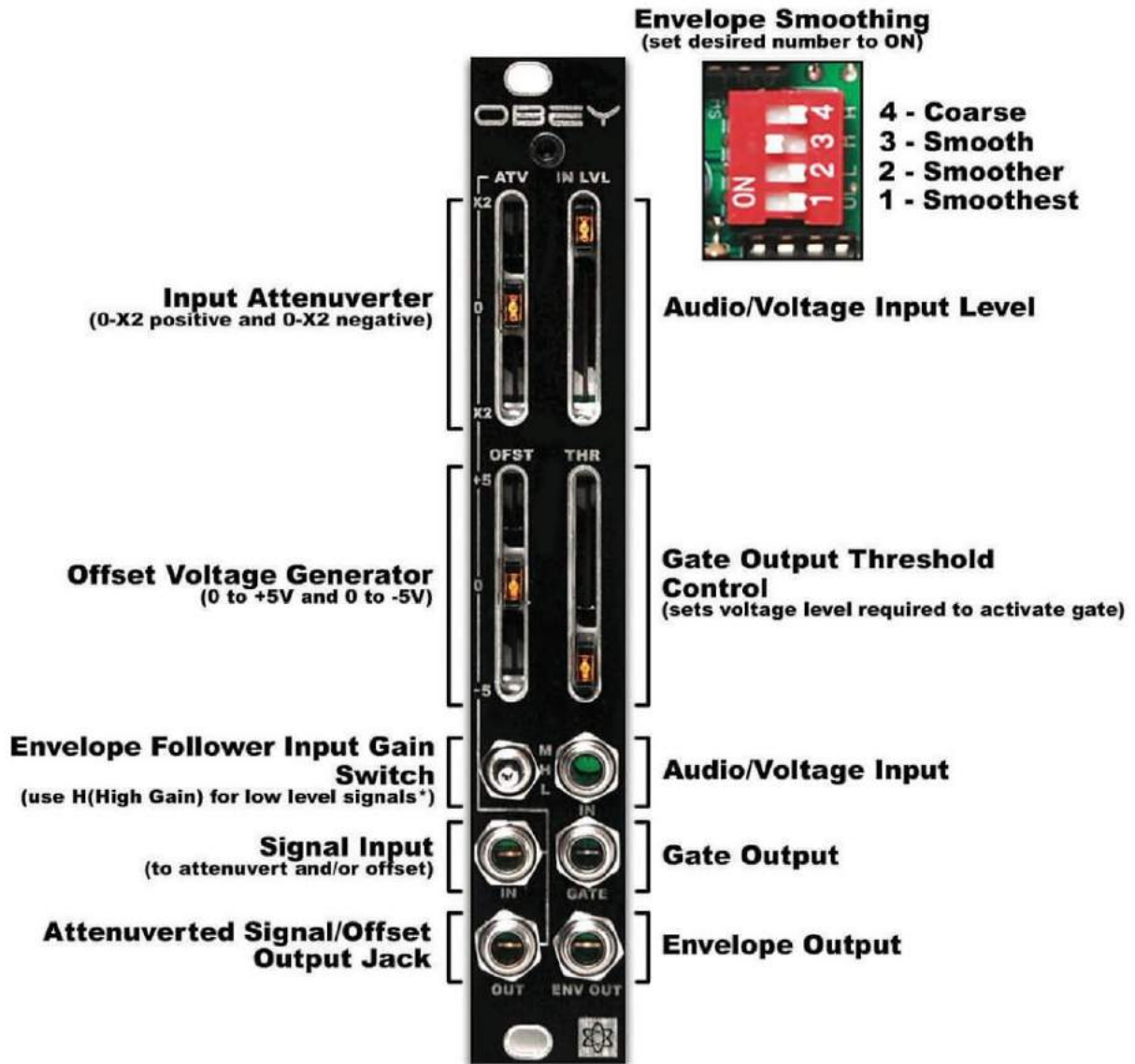
- Module width: 4HP
- Module depth: 48mm
- Current draw:
 - +12V: 25mA
 - -12V: 18mA

Powering Up Your Module

Turn off your modular system before plugging in your module. Plugging in your module while the power is on (“hot swapping”) can damage a module. Plug a 10 to 16 pin power cable into the module and then into your power supply, aligning the stripe of the cable with the STRIPE indicator on the power supply. Then power it on!



Quick Start Guide



*Passive guitar pickups and dynamic microphones are low level inputs. Use L(Low Gain) for Eurorack modular signals and (M) for intermediate levels.

Controls and Jacks

The OBEY module has two functions in one module: attenuverter/offset and envelope follower.

Attenuverter/Offset



ATV: Attenuverter Slide Potentiometer

- The attenuverter allows you to attenuate/boost/invert the SIGNAL INPUT. If the slide pot is centered at zero, the signal will be zero.
- The max voltage is limited by the power rail (approximately +/-12V).
- The attenuverter requires an input signal in order to function.
- The LED remains lit while the module is powered on.

OFST: Offset Slide Potentiometer

- Provides up to 5 volts in both the positive or negative.
- Will still output voltage even if there is not input signal.
- The LED remains lit while the module is powered on.



IN Jack (left hand side)

- Accepts audio and CV sources to be attenuated/boosted/inverted/offset.

OUT Jack

- The output of the attenuated/boosted/inverted/offset signal.

Envelope Follower



IN LVL: Input Level Slide Potentiometer

- Sets the amplitude of the audio/voltage input signal to be followed.
- The IN LVL and THR pot LEDs will flash in sync with the GATE output.

THR: Threshold Slide Potentiometer

- Sets the point at which the incoming signal will generate a gate to the Gate Output. Gate output stays high until the Audio/Voltage signal drops below the threshold setting.
- The IN LVL and THR pot LEDs will flash in sync with the GATE output.

M/H/L Switch

- Controls the input gain of the audio/voltage input signal: Medium/High/Low. Set the switch to H (High Gain) when plugging in low level input signals such as passive guitar pickups and dynamic microphones. Use L (Low Gain) for Eurorack modular signals and (M) for intermediate/medium levels.
- Please note: When in high gain mode (H), there may be a ~100mV positive offset. When using the OBEY module in high gain mode with a VCA, you may hear a slight bleed through your VCA due to the offset. If you would like to remove this bleed completely, patch the envelope output into the attenuverter/offset portion of the module and add a small amount of negative offset to compensate.

IN Jack (right hand side): Audio/Voltage Input for Envelope Follower

- Accepts mono audio sources and CV sources. Plug a Eurorack module, passive microphone, piezo, guitar, drum machine, Game Boy, etc into your system.
- Stereo sources: Stereo sources such as a phone can be plugged into the input, but only the tip of the plug (typically the left side of stereo) will input signal into the OBEY.
- ***Important: The maximum input voltage is 10V peak to peak. Anything higher may damage the OBEY module and other modules in your case. A powered amplifier for example can produce well over 10V and cause damage. High voltages can cause destruction of equipment, fire, death and almost certain embarrassment.***

GATE Jack

- Outputs a +5V gate that remains high relative to your threshold level setting and the amplitude of your input signal.

ENV OUT Jack

- Outputs a positive envelope or variable voltage signal that is relative to the amplitude of the input source. If the input signal is complicated, the envelope output and the gate output will be more coarse or jagged. This is why we have included an internal smoothing switch (see below).
- The max voltage is limited by the power rail (approximately +12V).
- A hot signal input may cause clipping. Adjust the M/H/L switch and IN LVL accordingly.





Internal Envelope Smoothing Switch

- This switch uses filtering caps to smooth the jagged edges of a complicated signal. The circuit responds best with just one setting switched on. Filtering caps smooth out those harsh edges to taste.
- Affects both the envelope and gate output signals.
- Settings are:
 - 1. Ultra Low (smoothest)
 - 2. Low
 - 3. Medium
 - 4. High (most precise and detailed)

More questions? Get a hold of us here:

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