

"Sitting at the round metal coffee table, on the deck of my beach house, I cannot tell whether it will come inland or stay hovering over the waters; I know it is a storm cloud because of the lightning, extending to space and salt, exchanging energies." Ieaskul F. Mobenthey --- Barre Manual --- Page 1

The *Barre* controller is intended for use with Ieaskul F. Mobenthey modules for the Eurorack paradigm. All inputs for the modules are tuned for passive use with piezoelectric discs; the impedance is a nominal 10 megohms. Thus this *Barre* controller is completely passive, and works by injecting positive and negative current to any input it is connected to. Press and release present polarized current flows, thus in the illustration 1, the top shows various voltage curves that would be generated by various pressure strokes on the bars, with micro-jiggles in between that form the unique identity of every organic gesture. This is called an *s-curve*, because it goes positive and then negative. This illustration is derived from a lecture Ieaskul did at Santa Barbara, about triangle waves. The bottom part of the illustration shows a *z-curve*, which incidentally can be had by using *Swoop* in consecutive triggering mode.



Illustration 1: s-curve and z-curve facsimile

In fact, *Swoop* would be a natural choice for pre-processing *Barre*. Send the piezo signal into the bounds input, and it will create various articulated triangulations reflecting the dynamics, intensity, and duration of the organic signal. Then send this as a control signal to any other module.

Remember Deleuze's definition of *Body without Organs* from his later text on Francis Bacon: "the BWO may in fact contain organs, but resists becoming an organism". Quoting Burroughs, any module should act orally and anally, and anywhere in between. This means that control signals can become audio generators, and vice versa; any chain or hierarchy can be reversed or rearranged. Try sending *barrework* into every module, as an audio input, as filter parameters, frequency modulation, or bounds control.

Make your own

The *barre* controller is only one example of using piezoelectric discs as inputs to Ieaskul's modules. You should at least experiment with making your own, using these discs, affixed to various flexible or acoustic surfaces, and in the simple electronic schematic as described in the following:

- brass outer rim connects to ground
- ceramic interior connects as signal

Simple as that. There are a wide variety of piezo discs available. Thinner ones actually will generate more gesture as you wave them in the air. Thicker ones could handle being banged upon more. Bars, levers, sheets of wobbly metal, little cuckoo clocks ticking their beaks onto the ceramic, cardboard boxes, fiberglass boats or circuit boards, the sound of an audio cord and its wiggling gestures as you move it on your desk, a monkey cage, a baby crib, the Eurorack cabinet as it sways in hurricane-force wind, bridge members, gunshots, moisture.



Drawing 1: Make Your Own Barre Controller