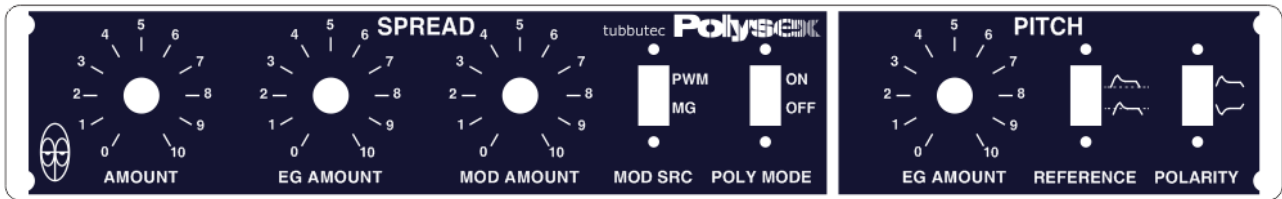


## Polysex user manual

The Polysex mod is divided into two parts: The pitch mod and the voice spread mod.



The **pitch mod** routes the Polysix's envelope (EG) to the voice pitch. This can be used for example for portamento like sounds, percussive instruments, brass sounds and a wide range of experimental sounds. You can choose the amount of the modulation with the knob labeled 'EG AMOUNT'.

Furthermore you can choose the polarity of the envelope with the 'POLARITY' switch. If the switch is into the upper position, the voice will pitch up in the attack phase and pitch down in the decay and release phase. With the switch in the lower position, the voice will pitch down in the attack phase and pitch up afterwards.

You can also select the reference point of the pitch change with the 'REFERENCE' switch. This is the point in the envelope where no pitch change takes place. It can be selected to either be the sustain level, or the zero level as indicated by the dashed lines in the pictograms. The 'REFERENCE' switch also acts on the voice spread section.

The **voice spread** mod spreads the pitches of the six voices apart. It does it in such a way, that the mean pitch of the Polysix stays in tune. It is used in the unmodified Polysix to create a fatter sound in unison mode, but with this modification a much wider range of sounds are possible. Very general speaking, in unison mode it controls the 'fatness' of the sound, in polyphonic mode it controls the 'detunedness' of the synthesizer.

The 'AMOUNT' knob adjusts the amount of voice spread, the 'EG AMOUNT' the amount of modulation by the envelope and 'MOD AMOUNT' the amount of modulation by one of two LFOs (low frequency oscillators). You can choose between two modulation sources with the 'MOD SRC' switch. You can either select 'MG', the Polysix's modulation generator, or 'PWM', the Polysix's PWM modulation generator. Use the 'PWM Speed' knob in the VCO section to control its speed. The 'POLY MODE' switch defines whether voice spread is activated in polyphonic mode (ON) or just in unison mode (OFF).