



### Mounting/Connection tips;

The supplied power cable is keyed. That means it can only be fitted one way! (Unless you use excessive force).

Pin one is at the top on our modules (Doepfer fit their sockets upside-down). AS Modules use a 14 pin 'boxed' header on the PCB.

The two ends of the power cable are different. Plug the 14pin socket end into the Module power header.

Disconnect your case/PSU from the mains, then plug the larger 16pin socket into your case's power supply.

The pin out on both plugs is the same.

*Note:* Physically disconnect your power supply/case from the mains electricity.

Ensure you connect up the module correctly!

Ensure it is screwed into the case.

Ensure no metal parts can short out the solder joints on the rear.

Ensure your case is 100% functional before fitting the module.

Most issues trace back to plugging in the power cable in incorrectly.

### Specification:

Width: 18HP  
Depth: 35mm  
Weight: 197g  
Voltage: +/-12V  
Power: +12V, 15mA / -12V, 28mA

Doepfer style power cable included.

Screws not included due to the wide variety of case and screw types used.

The Telemark multimode filter is based on the filter of the legendary Telemark semi-modular synthesizer. It's routes lie in the original 1970s Oberheim SEM, though it has developed a character of its own. The filter is a 12db/Octave multimode type. Multimode means there are more than one type of filter output. There are in fact four: low pass, band pass, high pass and notch filter. Additionally, notch filter can be varied for an even wider range of sounds.

Use of Gain and Q allow for even wider possibilities.

No special knowledge is required to use this filter. Just plug your audio in the left, and your audio out on the right.

Optionally (and recommended!) patch a control voltage in to give the sound movement.

The CUT-OFF control is used to change the tone of the signal.

To change the input level of the audio signal, turn this.

Peak (AKA Resonance) - increase this to make the sound more squiggly. As it approaches maximum you will get continuous feedback & the sound will be all like eeeeeeee.

Use this to alter the level of the CV signal coming in socket CV1.

Use NOTCH to alter the balance between Lowpass (LP) and Highpass (HP) audio that comes out of the NOTCH socket. Left is LP and right is HP.

When GAIN is on (up) then the input signal is boosted and the filter input can more easily be over-driven. Use this for a dirtier sound. When gain is on the output level will be higher.

When Q is on (up) then the amount of feedback possible using the PEAK control is increased. The resonance will be more pronounced - and - louder! More EEEEEEE. If you cross-mod the cut-off using audio from a VCO, you will get a more pronounced affect with this turned on, and with PEAK set to maximum.

A.IN is the audio input to the filter. Typically feed a VCO into here.

CV1 / CV2 / CV3 control voltage inputs. feed CVs into here to alter the cut-off frequency. Typically use EG, LFO or sequencer outputs. CV1s range can be attenuated with teh CV1 LEVEL control.

These are the audio outputs from the filter.  
LP = Low Pass  
BP = Band Pass  
HP = High Pass  
NOTCH = Well, notch.  
All four can be used at once.  
Or use two for S-T-E-R-E-O filtering.