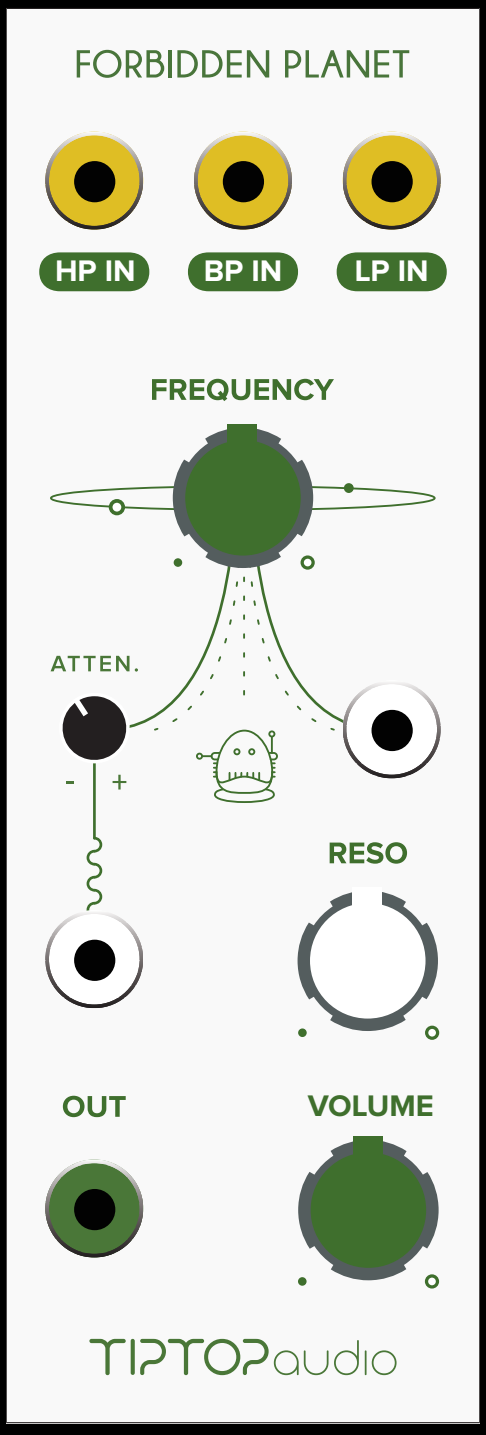
TIPTOP audio



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Forbidden Planet User Manual

The Tiptop Audio Forbidden Planet is a voltage controlled resonant multi mode filter in Eurorack format. There are 3 modes: High Pass (HP), Band Pass (BP) and Low Pass (LP). Each mode has its own audio input that can be used simultaneously. The filter frequency cutoff has two voltage control inputs, one attenuated and one full scaled. The filter also has a resonance control knob and an output master volume knob.
Lets get started:

1. Begin with the RESO all the way OFF (counterclockwise).

2. Plug a saw wave into the LP IN jack, set the RESO knob all the way down counter clockwise, set the Volume knob to about 3 o'clock and plug the OUT jack to your audio system.

3. Rotate the FREQUENCY knob full scale, you are now hearing the filter in Low Pass mode.

4. Connect the output of an envelope generator into the un-attenuated CV input, turn the frequency knob to around 9 o'clock and trigger the envelope now you can hear the envelope modulating the cutoff frequency of the filter. Adjust the envelope attenuator to vary the modulation amount.

5. Plug an LFO into the attenuated CV input, adjust the attenuator to increase and decrease the amount of LFO modulation. Now you can hear the filter being modulated by an envelope and an LFO at the same time with full control over modulation amounts. Manually play with the filter frequency and slowly turn the RESO knob clockwise, listen to how it starts emphasizing the cutoff harmonics and as it increases the filter starts to self oscillate creating a sine wave tone whose pitch is controlled by the filter cutoff frequency, essentially turning the filter into a sine wave oscillator. As the resonance knob reaches its maximum position the circuit starts to saturate and becomes unstable and confused, making it sounding aggressive and scattered. Forbidden Planet can go from smooth and crisp all the way up to aggressive and chaotic plus anything in between. The resonance is impacted by the gain of the input signal, a lower gain will make the resonance appear strongly.

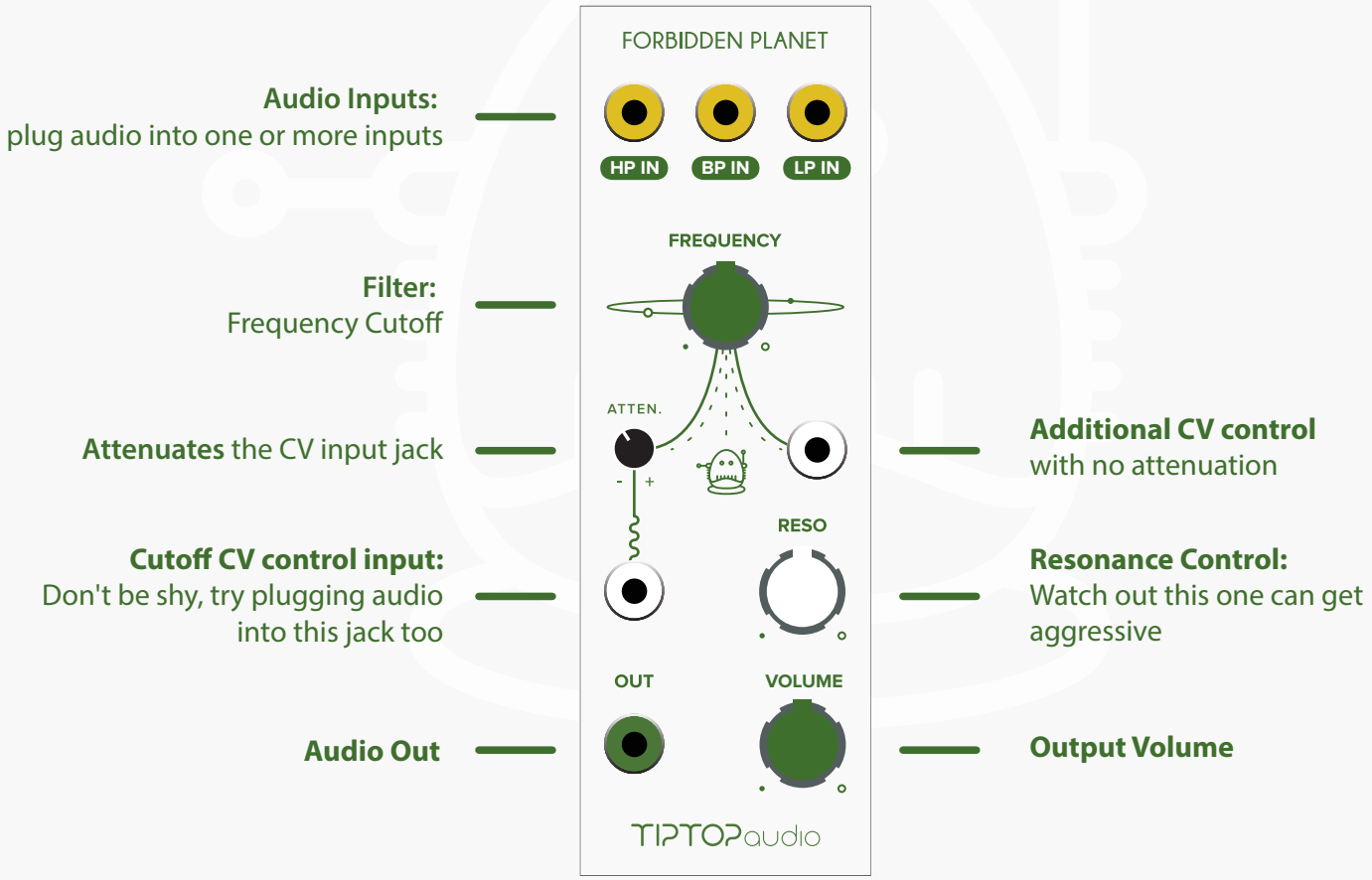
6. Turn off the RESO knob, unplug the LP in jack and plug the audio signal into the HP IN.

7. Follow the steps above to get a feeling of the beautiful quality of Forbidden Planet's highpass mode. Note that the frequency control and and CV inputs will now work in reversedirection to the low pass mode, set them opposite to what described above.

8. To get a feel of the Band Pass mode plug in a harmonically rich sound like a chord or a drum submix (a drum loop), listen to how the band pass lets you emphasize a narrow band of frequencies from the sound source while cutting out the others.

9. Increasing the resonance effectively narrows the frequency band and increases its gain (volume). The Band Pass can also be very useful on single sounds and it is essential in synthesizing drum sounds. The sounds in the classic analog drum machines of the past are synthesized using noise sources, oscillators, envelopes but most importantly, yes you guessed it right, band pass filters!

We hope you enjoy your stay on Tiptop Audio's Forbidden Planet.



http://tiptopaudio.com/forbidden-planet-analog-filter/