



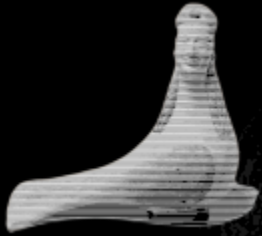
**P565**

**SIREN**

**User Guide**

Version 1.4

# Foreword



Fabled tales are full of creatures that are a unification of beauty and beast, with none more alluring or captivating than the enticingly deadly Siren of Greek mythology. Sirens are half-bird, half-woman creatures whose seductive chants brought death and ruin to countless sailors. Something beautiful, mysterious and magical happens when the spirits held within separate entities are brought together as one. Such is the Pulsar Modular P565 Siren, the enchanting result of bringing together the essence of the smooth, ground-breaking UREI 565T Filter Set and the infinitely expressive Moog Ladder Filter.

As with all things Pulsar Modular however, that is just the beginning. The addition of unique signature analog drive and overdrive, a stepped filter switch that enables dub and reggae King Tubby Big Knob style and creative phase manipulation options including inversion and a wet signal delay rounds out this deep, beautiful sounding processor. P565 blurs the line between instrument and effect as it wraps itself in and around the source signal, sounding and feeling like it is part of it rather than affecting it externally. Our creative sides know what this means. It is very much like the difference between playing an instrument and an instrument being a natural extension and expression of who we are.

P565 is poised to be the professional audio engineer's most indispensable and special tool, providing a thoughtfully and carefully designed set of filters for equally effective use in both traditional applications and creative applications. From pristine vintage clarity and depth to creative modern expression and experimentation, P565 is breathtaking in its intuitive yet extensive capabilities.

Affectionately known as the Little Dipper, the UREI 565T Filter Set was originally introduced to the world as a high quality replacement for stock dip filters that were commonly available in the '70s. Featuring state of the art computer aided designed active filters, the unit was nothing short of space-aged, having the ability to do things that were not possible at the time with conventional designs such as removal of unwanted noise such as whistles and hums with never before heard extremely narrow bands of pristine filtering. It went on to not only be a crucial problem solver, but a creative tool allowing for nontraditional and radical phase sweeps with extreme tonality shift.

The Moog Ladder is extolled as a creative sound shaping and sculpting tool that can be used for anything from subtle analog filtering to bringing on the classic and sought-after Moog funk. At the creative heart of The Ladder is a loudness contour envelope follower that dynamically modulates a cutoff frequency, translating the incoming signal into a virtual studio assistant twisting and turning knobs to the groove of the song.

The sound and function of the Altec 9069B became a fundamental characteristic of dub in the '60s as King Tubby's prominently featured secret weapon. The 9068B and 9069B filter sets are beautiful sounding passive filters that are treasured by those who know and love them. The main characteristic feature of these filters is the stepped selection of cutoff frequencies. These filters can be used in static positions to eliminate unwanted frequencies, but they can also be used to perform extreme sweeps with ease and precision.

These, folks, are the precursors to all the freak-y, volcano-y, drop-y filters that are gracing the DAWs of today.

This truly mythical beast can go from finessing your audio like a sweet and subtle gentle lullaby to filling it with complex pulses and waves of infectious emotion. It is impossible not to become entranced by its spell.

Use the high pass, low pass or dual independent band reject/bell or notch/bandpass filters as pure filters or allow the music to influence their movement with the envelope follower. Use it for anything from subtle tonality shaping to crushing overdriven distortion or for creative modulation effects such as phasing, flanging and sweeping resonance effects. The choice is yours... or perhaps this is just what the Siren has entranced you to feel? Pulsar Modular – **The sound is unbelievable.**



Hint: Look for mirrored control descriptions if you don't see what you are looking for!

**Dry Polarity**

**Wet Polarity**

**External Sidechain**  
Enables external signal feed to the envelope followers

**OS – Oversampling**  
Enables OS options (OFF, INTEL, VINTAGE or HD)

**Preset Browser**

**Step Filter**  
Enables HPF/LPF King Tubby Big Knob style stepped filters

**A/B Compare**

**Options Menu**  
About / License Status / User Guide / Options and Preferences

**Filter SLOPE dB**  
12 dB/oct, 24 dB/oct or 18 dB/oct

**Filter RESONANCE**  
Adds positive resonance or smooths the curve at the filter cutoff frequency

**Filter Cutoff Frequency**  
Sets the point where the filter starts working. Enable or disable with the red (HPF) or blue light (LPF). Switchable from continuous to stepped.

**Envelope Follower**  
Enable or disable with the pink light

**ATTACK**  
How quickly the envelope follower reacts to the signal

**AMOUNT**  
Degree of frequency change. Negative decreases the frequency, positive increases.

**RELEASE**  
How quickly the envelope follower stops reacting to the signal

**SPEED**  
I slow, II medium, III fast. The rate at which the frequency changes.



**NOTCH/PEAK RANGE**  
Enable or disable with the green light.

**NOTCH/PEAK Frequency**  
20 Hz to 20 kHz with RANGE disabled, 20 Hz to 200 Hz at x1, 200 Hz to 2 kHz at x10, 2 kHz to 20 kHz at x100. Center point of the selected filter.

**Envelope Follower Routing**  
Selects which filters (NOTCH/PEAK or HPF/LPF) are affected by the envelope follower.

**NOTCH/PEAK Filter Type**  
Click the label to switch between complementary REJECT/BELL or NOTCH/BPF types. Enable or disable with the green light.

**DRIVE**  
Analog filter distortion. PRE to place it before filters, POST to place it after filters.

**Resize**

**LEVEL**  
Adjusts the dynamic range of the signal fed to the envelope follower

**OUTPUT**  
Transformer coupled gain – applies to wet signal


**MAIN OUT**  
Clean gain – applies to wet + dry signal


**POWER**  
Bypass processing


**OVERDRIVE**  
Awesomesauce. As if Siren wasn't special enough.


**WET DELAY**  
Creates beautiful phasing and comb filtering effects


**MIX**  
Blend the desired amount of dry and processed signal

 Bypass allows the unaffected audio signal to pass through. When not bypassed, P565 Siren always imparts its alluring signature character by design.


 Wet polarity inverts the input signal so all internal processing is applied to the inverted signal.


 Dry polarity inverts the unaffected dry audio signal.

 The external sidechain button enables use of an external source as the signal feeding the envelope follower. Consult the documentation for your DAW for external routing options and instructions.


 Oversampling options allow P565 to optionally operate at a multiple of the host sample rate. With OS off, P565 operates with zero latency at the host sample rate (x1).

When oversampling is on, different options are made available. See the descriptions of INTEL mode, VINTAGE mode and HD mode below.

 INTEL (intelligent) mode operates at double the host sample rate (x2). It scans the full frequency spectrum and attenuates any aliasing signals. The amount of processing applied by this advanced filtering is highly dependent on the signal and the degree to which P565 is being pushed.

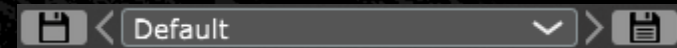
 VINTAGE mode operates at double the host sample rate (x2). It applies smooth filters to upper frequencies to maintain a classic rolled-off characteristic and allows any aliasing signals to remain unfiltered. This provides the ability to creatively combine a smooth, vintage top end with modern


inharmonic distortion. This is most effective when oversampling at a 44.1 kHz or 48 kHz host sample rate.

 HD mode operates at an internal sample rate of 384 kHz. It utilizes the same full frequency scan filtering strategy as INTEL mode. The high sample rate and filtering mechanism make this a pristinely high-quality option at a surprisingly efficient CPU load. This mode is equally suitable for mastering duties or for key tracks when mixing.

To achieve HD oversampling, P565 applies the following logic:

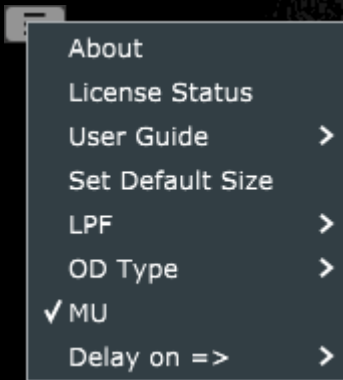
- 44.1 and 48 kHz oversamples at x8
- 88.2 and 96 kHz oversamples at x4
- 176.4 and 192 kHz oversamples at x2, thereby enabling INTEL and VINTAGE options
- 384 kHz disables oversampling options

 The preset browser allows for modification of the currently selected preset using the save icon to the left of the browser (direct save) or for creation of new presets using the save icon to the right of the browser (save as...). A red asterisk\* will appear beside the left save icon indicating the loaded preset has been modified and can be overwritten.

 The step filter button converts the high pass and low pass filters from being continuously variable to being stepped. This enables additional creative options in the style of King Tubby's infamous Big Knob. Step filter mode is available for all dB/oct slopes.

**A B →B** A/B allows for temporary storage of different settings for quick comparison. The arrow button allows for copying the active side to the inactive side.

*Tip: When comparing settings, clicking the A/B button will perform the toggle. This is a single button, so it is not necessary to move the mouse to alternate back and forth. This makes it easy to compare without knowing which one is selected. We recommend doing this with your eyes closed for maximum focus.*



### Options Menu

**About** – Check the version number or demo expiration date.

**License Status** – Manage your license.

**User Guide** – Open the EN, DE or ES user guide.

**Set Default Size** – Sets the default size for new plugin instances to the size of the current instance. This is a global setting. Existing instances will not be affected.

**LPF** – Options for A or B low pass filter type. Selecting option A engages the default signature low pass filter. Selecting option B engages an alternate topology filter.

Filter A allows for dB/oct slope adjustment. This filter is slightly more aggressive and slightly more colorful than Filter B.

Filter B selection disables the ability to adjust dB/oct slope. This filter features a 24 dB/oct slope with a beautifully smooth

character that belies the steepness of the slope. Additionally, when B is selected, a 6 dB/oct HPF is applied at 10 Hz. Enabling the HPF will override this behavior.

**OD Type** – Choose from Original or Alternative options. Original is the brutal overdrive that initially shocked the audio world with unrelenting ferocity. Alternative is just ever so slightly less aggressive, allowing more transients to pass through, making it a little more articulate and detailed than the original.

*Tip: Try adjusting the signal level going into Siren and enjoy how the overdrive circuit reacts to the input signal level. By doing this, you too can turn this raging mythical beast into a... slightly less raging mythical beast. Seriously, you can't tame it, but you sure can have fun trying.*

**MU** – Engages the funky-ass Mu-Tron switch. This mode alters the envelope following behavior in such a way that it hugs and caresses the tracked signal funkiciously. Funkticious tracking produces an almost vowel-like sensation in the resulting sounds. We affectionately refer to what we hear coming out the other end as 'the quack'.

*Tip: Using your ears while adjusting the LEVEL trim pot is critical (and so much fun) when experimenting with the MU switch.*

*Tip: Check out the Tips, Tricks and Techniques section for MU and LEVEL tips!*

*Note: The NOTCH/PEAK bell and bandpass filters are reduced by half the original Q (becoming wider) when MU is enabled. The band reject and notch filters are unaffected by MU.*

**Delay on =>** – Option for changing the WET signal DELAY trim pot from the default setting of WET to an alternate setting of DRY. Setting this option to WET results in the WET signal DELAY trim pot delaying the processed signal relative to the unprocessed signal. Conversely, setting this option to DRY results in the WET signal DELAY trim pot delaying the unprocessed signal relative to the processed signal.



The HPF SLOPE dB selector sets the slope of the cutoff frequency.

In addition to choosing the dB/oct slope, the SLOPE selection will also affect the RESONANCE characteristics and the Q values of the PEAK filters if they are engaged. See the RESONANCE and NOTCH/PEAK band filter selector documentation for details of these features.

The 12 dB/oct (2-pole), 24 dB/oct (4-pole) filters follow a familiar sound and design as indicated by the markings under their respective labels. The 18 dB/oct (3-pole) slope on the other hand is intended for more creative manipulation and features more radical Q values. These are simply intentions and not rules though – use your ears and choose whatever sounds best!



The HPF cutoff frequency knob sets the point from where the high pass filter starts working.

When in continuous mode, it features a frequency range of 20 Hz to 7.5 kHz.

When in stepped mode, available frequencies are 70, 100, 150, 250, 500, 1000, 2000, 3000, 5000 and 7500 (in addition to the lower frequency limit as describe above).

Frequencies above the cutoff frequency are unaffected and frequencies below the cutoff frequency are cut.

If the envelope follower is engaged and the envelope follower routing knob is pointing to the HPF cutoff frequency knob, the LEDs will move counterclockwise or clockwise according to the parameters set in the envelope follower to indicate negative or positive cutoff frequency movement.

This filter can optionally be turned off using the red light beside the HPF label.



The HPF RESONANCE knob is used to either add positive feedback or to remove, flatten and smooth out the transition curve.

The default position has a Q of 0.707. Increasing this value adds positive feedback that peaks at the HPF cutoff frequency, resulting in very rich harmonic behavior.

As the knob is turned clockwise from the default position, overtones, coloration and harmonic emphasis of the frequencies around the cutoff become increasingly audible.

As the knob is turned counterclockwise from the default position, the Q is decreased, resulting in a lessening of harmonic behavior and a perceptibly smoother and mellower curve.

*Note: When the resonance knob is turned to roughly 4/10 of the full range, it will begin to self-oscillate. Be very careful with this feature because it can produce high amplitude high or low frequencies that are inaudible, but that may push or even damage equipment.*

*Important: Siren does not include a limiter or clipper in its design, so to take advantage of the behavior described above*

and for maximum control, place a limiter or clipper after Siren to get new and interesting results.



The NOTCH/PEAK band filter RANGE selector allows a restricted range to be applied to the respective NOTCH/PEAK band filter frequency knob.

Enable or disable with the green light beside the RANGE label.

If disabled, the NOTCH/PEAK band filter has a full range of 20 Hz to 20 kHz.

If enabled, the following options and resulting frequency ranges are available:

- x1 = 20 Hz – 200 Hz
- x10 = 200 Hz – 2 kHz
- x100 = 2 kHz – 20 kHz

*Tip: Use the range selector for narrowing the frequency selection range when creating sweeping effects if fine control over the selected frequency is desired.*

*Note: There are two instances of the band filter and associated controls, each having identical functionality.*



The NOTCH/PEAK band filter frequency knob sets the center point of the selected filter.

The type of NOTCH filter or type of PEAK filter is selected using the NOTCH/PEAK band filter selector. See the NOTCH/PEAK band filter selector for details on choosing the filter style and shape.

The range for the continuously variable frequency selection is determined by the NOTCH/PEAK band filter RANGE selector. The default range is 20 Hz to 20 kHz. See the NOTCH/PEAK band filter RANGE selector for details on restricting the range.

If the envelope follower is engaged and the envelope follower routing knob is pointing to the NOTCH/PEAK band filter frequency knob, the LEDs will move counterclockwise or clockwise according to the parameters set in the envelope follower to indicate negative or positive center point frequency movement.



The envelope follower routing knob determines which of the filters are affected by the envelope follower.

Point the routing knob towards the HPF/LPF cutoff filter to have the envelope follower dynamically influence the frequency of that cutoff filter.

Point the routing knob towards the NOTCH/PEAK band filter frequency knob to have the envelope follower dynamically influence the center point of that filter.





The switchable NOTCH/PEAK band filter selector allows for choice from three notch filters and three bandpass peak filters.

Click the label to switch between complementary REJECT/BELL (band reject/bell) or NOTCH/BPF (notch/bandpass filter) types.

Enable or disable with the green light below the NOTCH/PEAK label.

The combinations of band reject with bell and notch with bandpass are designed to be complementary filter type selections.

- The band reject filter attenuates frequencies to very low levels around a center point.
- The bell filter boosts a set of frequencies around a center point.
- The notch filter is a much narrow form of a reject filter.
- The bandpass filter allows only the set of frequencies around a center point to pass.

The Q values of the filters are dependent on and complimentary to the selected HPF/LPF slope.

- When 12 is selected:
  - Clockwise, beginning from the far left, the band reject filters are 0.667, 1.414 and 2.871 Q.
  - Clockwise, beginning from the far left, the notch filters are 8, 4 and 1.4 Q.
  - Counterclockwise, beginning from the far right, the bell and bandpass filters are 8.5, 3.3 and 0.9 Q.
- When 24 is selected:
  - Clockwise, beginning from the far left, the band reject filters are 1.111, 2.355 and 4.783 Q.
  - Clockwise, beginning from the far left, the notch filters are 15, 5 and 3 Q.
  - Counterclockwise, beginning from the far right, the bell and bandpass filters are 15, 6.6 and 1.8 Q.
- When 18 is selected:
  - Clockwise, beginning from the far left, the band reject filters are 0.889, 1.884 and 3.827 Q.
  - Clockwise, beginning from the far left, the notch filters are 20, 10 and 2 Q.
  - Counterclockwise, beginning from the far right, the bell and bandpass filters are 10, 5 and 1.2 Q.

*Note: The NOTCH/PEAK bell and bandpass filters are reduced by half the original Q (becoming wider) when MU is enabled from the help menu. The band reject and notch filters are unaffected by MU.*



The envelope follower extends the filtering capabilities of either the cutoff frequency, resonance and slope or the NOTCH/PEAK band filter, turning these into dynamic filters.

Enable or disable with the pink light above the ENV 1 or ENV 2 label.

The envelope follower tracks the loudness contour of the incoming signal, producing a voltage that

follows the dynamics of the signal. This voltage affects the position of the cutoff or center frequency of the selected filter, resulting in interesting and very musical dynamic filter effects.

When AMOUNT is negative, the follower will dynamically decrease the cutoff or center frequency. When the AMOUNT is positive, the follower will dynamically increase the cutoff frequency. At 0, it has no effect.

ATTACK determines how quickly the envelope follower responds to the incoming audio and RELEASE determines how quickly the envelope follower's release responds to the audio. ATTACK and RELEASE times are fastest at the 0 position.

LEVEL adjusts the dynamic range of the signal hitting the envelope follower. This results in increased or decreased envelope movement.

*Tip: With AMOUNT set to a non-0 position, turn the LEVEL trim pot counterclockwise until the light trails of the routed frequency knob are no longer moving. From that point, turn the trim pot clockwise until the lights are dancing as much or as little as desired and your ears are hearing the most pleasing effect on*

*the tone. This is particularly effective when MU mode is engaged, but it can (and maybe should) be used all the time.*

SPEED influences the rate at which the cutoff or center frequency changes within the range imposed by AMOUNT and subject to ATTACK and RELEASE characteristics. Available selections are slow (I), medium (II) and fast (III). Each setting introduces different musical colors and movement.

*Tip: To gain a practical understanding of SPEED, do the following: Enable ENV 2, point the envelope follower routing knob to LPF, select SPEED I and set AMOUNT to 0. Quickly move the LPF knob and observe how the lights trail the frequency selection, illustrating a slow rate of change. Now select SPEED III and move the LPF knob in the same way to observe a fast rate of change.*

*Tip: Check out the Tips, Tricks and Techniques section for MU and LEVEL tips!*

*Note: The envelope follower is based on the RMS of the sound being processed. Changing parameters such as cutoff frequency or range will affect what is processed. This, along with the effects of the envelope parameters themselves, is reflected in the behavior of the ring LED lights as shown either around the HPF/LPF cutoff frequency knob or the NOTCH/PEAK band filter frequency knob.*



The LPF SLOPE dB selector sets the slope.

In addition to choosing the dB/oct slope, the SLOPE selection will also affect the RESONANCE characteristics and the Q values of the PEAK filters if they are engaged. See the RESONANCE and NOTCH/PEAK band filter selector documentation for details of these features.

The 12 dB/oct (2-pole), 24 dB/oct (4-pole) filters follow a familiar sound and design as indicated by the markings under their respective labels. The 18 dB/oct (3-pole) slope on the other hand is intended for more creative manipulation and features more radical Q values. These are simply intentions and not rules though – use your ears and choose whatever sounds best!



The LPF cutoff frequency knob sets the point from where the low pass filter starts working.

When in continuous mode, it features a frequency range of 40 Hz to 20 kHz at 44.1 kHz sample rate, 40 Hz to 22 kHz at 48 kHz sample rate or 40 Hz to 24 kHz at higher sample rates.

When in stepped mode, available frequencies are 250, 500, 1000, 2000, 3000, 4000, 5000, 6000, 8000 and 10000 (in addition to the upper frequency limit based on the sample rate as describe above).

Frequencies below the cutoff frequency are unaffected and frequencies above the cutoff frequency are cut.

If the envelope follower is engaged and the envelope follower routing knob is pointing to the HPF cutoff frequency knob, the LEDs will move counterclockwise or clockwise according to the parameters set in the envelope follower to indicate negative or positive cutoff frequency movement.

This filter can optionally be turned off using the blue light beside the LPF label.



The LPF RESONANCE knob is used to either add positive feedback or to remove, flatten and smooth out the transition curve.

The default position has a Q of 0.707. Increasing this value adds positive feedback that peaks at the LPF cutoff frequency, resulting in very rich harmonic behavior.

As the knob is turned clockwise from the default position, overtones, coloration and harmonic emphasis of the frequencies around the cutoff become increasingly audible.

As the knob is turned counterclockwise from the default position, the Q is decreased, resulting in a lessening of harmonic behavior and a perceptibly smoother and mellower curve.

*Note: When the resonance knob is turned to roughly 4/10 of the full range, it will begin to self-oscillate. Be very careful with this feature because it can produce high amplitude high or low frequencies that are inaudible, but that may push or even damage equipment.*

*Important: Siren does not include a limiter or clipper in its design, so to take advantage of the behavior described above and for maximum control, place a limiter or clipper after Siren to get new and interesting results.*



The DRIVE knob produces a pleasing crunchy analog filter distortion.

Set the PRE/POST switch to PRE to position DRIVE prior to all filters.

Set the PRE/POST switch to POST to position DRIVE after all filters.



The MAIN OUT trim pot features -12 dB to 12 dB of clean gain. This allows the combined wet and dry final output signal to be cleanly increased or decreased.

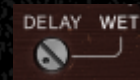


The MIX knob allows for blending a desired amount of dry signal in with the processed wet signal.



OVERDRIVE. We couldn't decide what to call this. Some wanted to call it the GO NUTS button. Some simply wanted to call it VICIOUS. There was even someone who didn't think it needed a name but

wanted it to go to 200 (that is a full 189 past 11, there Nigel)! We settled on OVERDRIVE. You can call it whatever you want, just use it with care... everywhere.



The WET signal DELAY trim pot allows the wet or dry signal to be delayed from 0 ms to 99 ms. The default is for the wet signal to be delayed. This can be changed to delay the dry signal using the Delay on => option from the options menu. Use this to create beautiful phasing and comb filtering effects.



The POWER button is synchronized with the bypass button on the main toolbar. When disabled, it allows the unaffected audio signal to pass through. When powered on, P565 Siren always imparts its alluring signature character by design.



The OUTPUT knob features transformer coupled gain. The output of this stage feeds into the MIX knob.

# Tips, Tricks and Techniques

## **.: Phasing and comb filtering for fun and profit... and butter :.**

*P565 Siren can be used to create beautiful phasing and comb filtering effects using the wet signal delay trim pot and/or the wet polarity inversion button.*

*For an effect that is more or less like melted butter, engage the wet polarity inversion button, engage a wide peak band filter option (or two), engage the envelope follower, adjust it to get a groovy movement happening and start delaying the signal using the delay trim pot. Adjust the mix knob to taste. Pour it all over your popcorn and enjoy. [ZS]*

## **.: Bandpass to isolate and pinpoint frequencies for bell or notch filters... and then some :.**

*In addition to using bandpass filters for creating otherworldly effects, they can be used for what they were originally intended for, strangely enough! Use a bandpass, for example, to pinpoint the smack of a snare. Once you find that area, switch to a bell and enjoy the nicely accentuated smack. As another example, use a bandpass in the same way to pinpoint a resonance in an acoustic guitar, then switch to a notch to clean it up.*

*If the bell or notch is not exactly what you were envisioning, think creatively about how to use Siren to perform more subtle moves and maybe even gain new techniques on your own. Say for example, the amplitude of the bell is not as subtle as you wanted. Try adjusting the wet/dry mix to blend the bell in with the dry signal. Not only does this make the move more subtle, it introduces some depth and dimension. You could stop here, but why not explore a little? For even more dimension, try adjusting the wet delay a little bit as well. When using the wet delay, listen carefully to the imaging and solidity of the signal that is being adjusted. You are listening for a barely perceptible separation between the wet and dry signals which imparts depth, but you don't want to introduce filtering that clouds the imaging... or do you? Maybe you just discovered something unexpectedly interesting and welcome? [ZS, KE]*

## **.: Keep both hands on the wheel when in overdrive :.**

*Overdrive can be a bit of an unbridled beast. While on some sources, it will be just what is needed out of the (in the) box, on other sources it will simply maim and destroy the source signal. Don't be too quick to put the brakes on when this is the case though. If OVERDRIVE is annihilating the underlying audio just wait... leave it like that for a few minutes and dial in appropriate LPF, HPF to focus an area, then adjust the DRIVE to contour the chaos. At this point, it still may sound like the inside of a volcano... but now, adjust the MIX to turn this into a parallel crushed effect that can be even automated on and off at different times to keep the listener interested with new and different textures.*

*This is a plugin that begs for experimentation. [KE]*

## **:: Shoot your TB303 into other spheres - Overdrive for the ultra-modern sound ::**

*Here is yet another of the many possible uses OVERDRIVE is made for. Do you want to send the kids of the moshpits to nirvana with your TB303-heavy track? Then do the following. Focus on a nice and crisp frequency range with HPF and LPF. Exact values should of course always depend on your mix, but for HPF starting frequencies around 200-300 Hz are suitable and for LPF the range around 800 Hz works effectively. Now thicken both filters with some RESONANCE, add until it tastes great for your ears.*

*Give the LPF some extra life with a positive value by the Envelope Follower. Turn DRIVE afterwards to about 25-30%, set POST and finally press OVERDRIVE: duck!...3...2...1...the rocket starts. MIX should hardly let any dry signal through. With a value of only about 10% DRY, this is where the fun really begins. Does TB303 actually go even creakier? Also play with the filter slopes. 18 dB breathes a scratchy, smoky James Brown character into the signal and 24 dB makes the sound endlessly punchy. A combination of 18 dB for the HPF and 24 dB for the LPF also works very well. Please experiment to your heart's content. Let off steam and playfully explore the sheer endless possibilities of transforming a sound with the Siren. [MK]*

## **:: Get on the pitch carousel – Or – The Turn Of The Screw ::**

*The WET DELAY trim pot doesn't need to be stuck in a static existence. In addition, this circuit creates a pitch shift in live performance. And this is how you push the merry-go-round... First turn the MIX to 100% WET and while you play your audio, turn the WET DELAY trim pot to your heart's content. Slow, fast... back and forth, try them all and listen closely to the tonal changes that occur. It takes a little while for the actual new setting to "snap into place" and it is precisely this period of time between 2 different values that you make use of. Perfect for DAW automations. In this way, incredibly lively modulations or cool special effects can be created on any type of sound material. My favorite so far are modulations on long sustain phases, for example on an 808, other distorted sounds and creaky synth bass lines. Turn Siren into an off-kilter punk queen with a loose screw. [MK]*

## **:: Everything You Always Wanted to Know About MU\* (\*But Were Afraid To Ask) ::**

*The MU option in the help menu is optimized for electric guitar and electric bass guitar (\*but not exclusively – see below). The key is the LEVEL trim pot. As LEVEL is increased, the original sound will become more contained and resonance will 'jump around' less. LEVEL controls the dynamic range the envelope follower is listening to. Increasing LEVEL decreases the dynamic range which results in the envelope follower fluctuating the filter in a more consistent way for both high and low volume input. In a practical sense, this affects the consistency of the 'quack' sounds, particularly when there is a big difference in strumming.*

*As mentioned above, MU is not exclusive to guitars and bass despite being optimized for them! Let's say you have a live drum track and you have Siren using a high resonance setting. If the resonance on the snare is fluctuating too much due to being hit at different dynamic levels, enabling MU and dialing in the sweet spot using the LEVEL trim pot will smooth out the filter behavior. [ZS]*

# Managing Presets

## Basics

If the option to install presets is selected during installation, updates will overwrite the original presets but custom named presets will remain untouched. Be sure to save your own presets with different names using the save as option (to the right of the preset browser), or alternatively, ensure the preset installation option is not selected when updating the software.

## Backing Up Presets

Presets can be backed up and restored using your operating system file manager. Simply perform a copy/paste of either individual preset files or the full presets folder to a backup location of your choosing. The presets folder can be found in the following locations:

### FOR WINDOWS

`'C:\Users\Public\Documents\Pulsar Modular\P565 Filter Set\Presets'`

### FOR MAC OS X

`'/Users/Shared/Pulsar Modular/P565 Filter Set/Presets'`

# General

## Fine Tuning Mode

Press and hold the modifier key (in macOS: “control, option or command”, in Windows: CTRL) while moving the knobs.

## Uninstalling P565 Filter Set

### FOR WINDOWS

- In 'C:\Program Files\Common Files\VST3', locate the 'P565 Filter Set.vst3' file and delete it.
- In 'C:\Users\Public\Documents\Pulsar Modular', locate the 'P565 Filter Set' folder and delete it. This folder contains the user guide and presets. If no other folders exist under 'Pulsar Modular', this can be deleted as well.

### FOR MAC OS X

- In '/Library/Audio/Plug-Ins/Components', locate the 'P565 Filter Set.component' file and delete it.
- In '/Library/Audio/Plug-Ins/VST3', locate the 'P565 Filter Set.vst3' file and delete it.
- In '/Users/Shared/Pulsar Modular', locate the 'P565 Filter Set' folder and delete it. This folder contains the user guide and presets. If no other folders exist under 'Pulsar Modular', this can be deleted as well.

## Restrictions

The USER may not reverse engineer, disassemble, re-sample, create Impulse Response profiles or re-record, decompile, modify, alter in whole or in part PULSAR NOVATION LTD audio plugins for the intent of renting, leasing, distributing, repackaging (whether for profit or not).



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Please kindly report any errors or omissions in this user guide to [psupport@pulsarmodular.com](mailto:psupport@pulsarmodular.com).

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