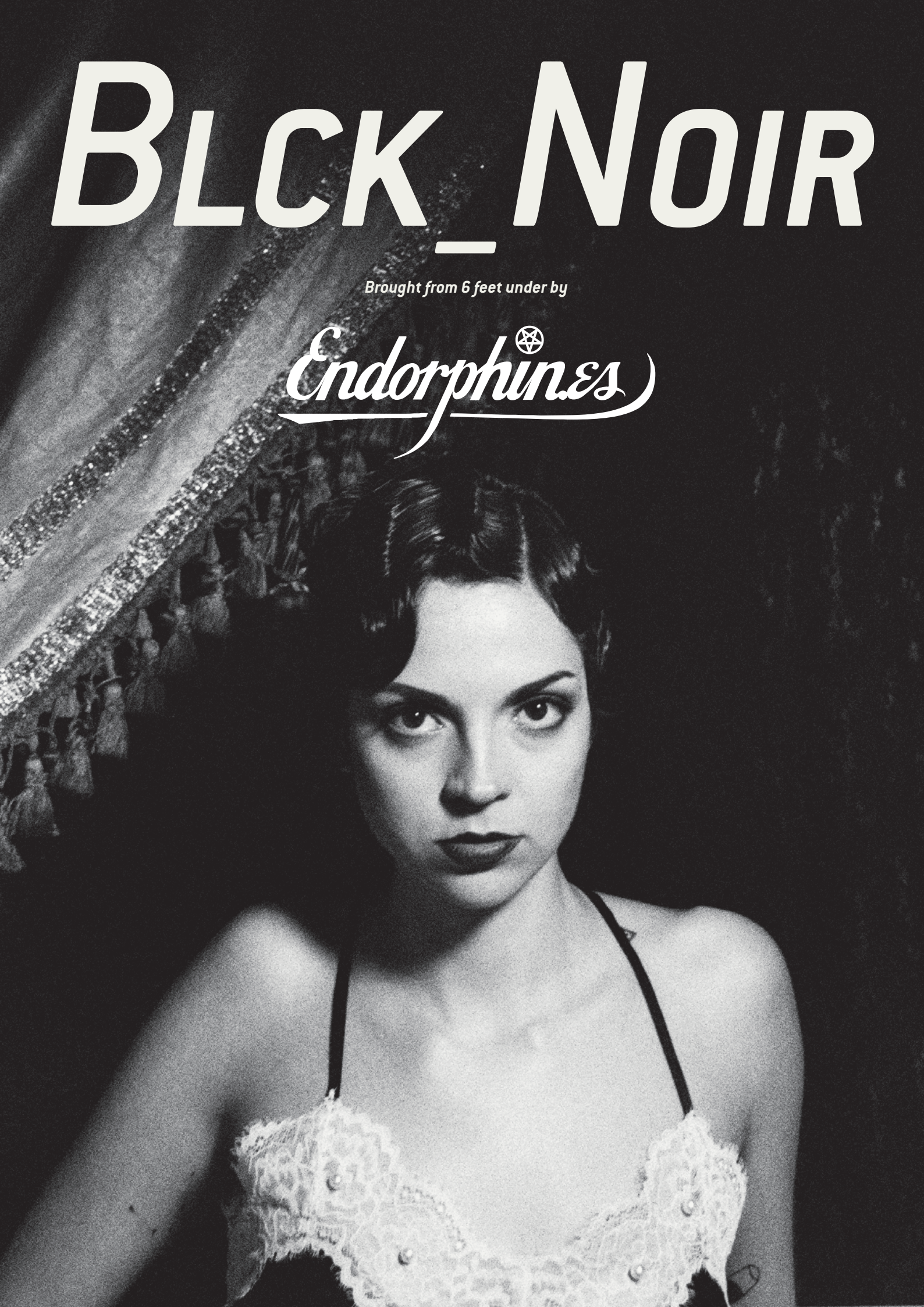
BLCK_NOIR

Brought from 6 feet under by

Endorphines



HELLO DARKNESS, MY OLD FRIEND.

Photo copyright: © Andreas Van Ingen

RTFM – be so kind and read the manual. It will provide you with the information you need to fully indulge in the module you just purchased – for which we like to thank you.

Enjoy your sound experiences, dear sonic traveller.

Beginning from the product's purchase date a 1-year warranty is guaranteed for each product in case of any manufacturing errors or other functional deficiencies during runtime.

The warranty dœs not apply in case of:

- damage caused by misuse
- mechanical damage arising from careless treatment (dropping, vigorous shaking, mishandling, etc.)
- damage caused by liquids or powders penetrating the device
- heat damage caused by overexposure to sunlight or heating
- electric damage caused by improper connecting

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FURTH BARCELONA, S.L.

VAT ID:ES B66836487

THIS MODULE AND THIS PAGE INTENTIONALLY MADE BLACK

PORTABLE DARKNESS

- 30 HP width under a black panel, < 2 cm or 3/4“ in depth
- 7 drum voices in the analog kit: bass drum, snare, tambourine, closed and open hi-hats, metallic beat and cymbal;
- hybrid sound generation: band-limited digital noise with spectrum animation, injected into analog circuits
- full discrete analog generation part, using inductor coils instead of op-amps
- on-board effect processor with 8 effects, including additional auxiliary input and firmware update over audio
- drums that have character: fit all styles of music – specifically tuned for darkwave and techno
- separate analog outputs and isolator-style final filter with resonance for main outputs.

MORE GOOD THINGS TO COME

In close future there will be a firmware update that replaces the 8 effects with 8 drum-oriented ones.

NOW YOU ARE MINE

BLCK_NOIR is a complex 7 voice analog drum / percussive synthesizer module.

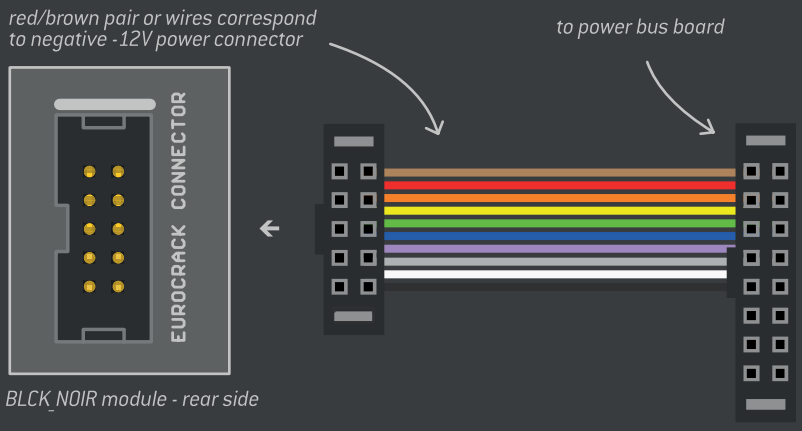
Power requirements: +12V: 240 mA; -12V: 75 mA; +5V: not used.

AT THE BEGINNING, IT WAS ALL BLACK

The BLCK_NOIR comes complete with:

- module itself
- 10 to 16 pin ribbon power cable
- 4 fixing screws with 4 washers
- optional stickers.

Be sure to connect the module properly in your power bus board according to the following orientation:



BLCK_NOIR module - rear side

***Warning:** module uses choke coil inductors in sound generation. You may see those coils from the backside of the module. To avoid possible noise hums, don't place the module close to a power supply transformer or DC-DC power modules in your case.*

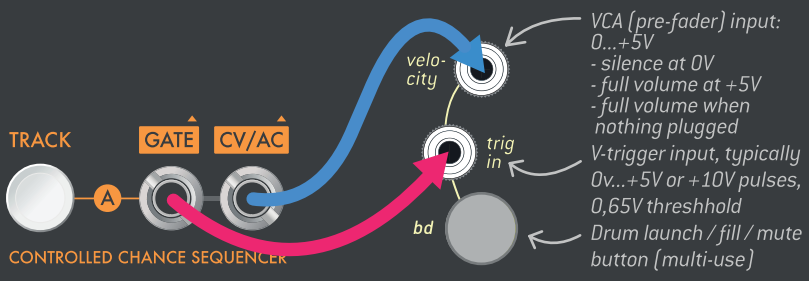
ABOUT: BLANK

BLCK_NOIR is a drum generation module; therefore, to operate, it requires a running sequencer or triggers generator.

7 drum voices are grouped into 5 channels:

- bass drum (bd)
- snare drum (sd)
- tambourine (tb)
- hi-hat (closed and open hi-hats: ch, oh)
- metallic (metal beat and cymbal: mb, cy)

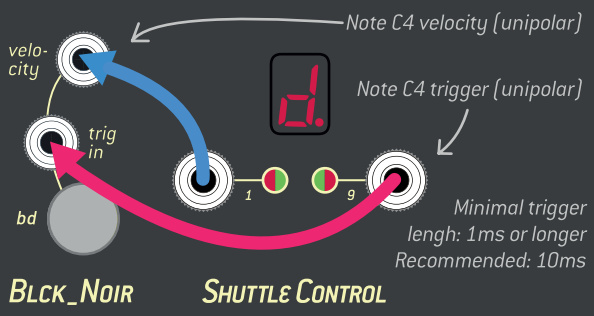
Drums are triggered by applying analog pulses/gates into corresponding trigger inputs:



Every drum channel has a CV VCA controlled Velocity input, which defines the amplitude (volume) of the drum channel. When no plug is inserted into the velocity jack, the volume of that channel is maximum by default. Think of the Velocity input as either VCA to make accents for your drums, or as an envelope input to adjust the dynamics.

I SEE BLACK LIGHT

Alternatively, you can use any MIDI sequencer, groove box, drum machine or DAW using MIDI to CV/GATE converter:

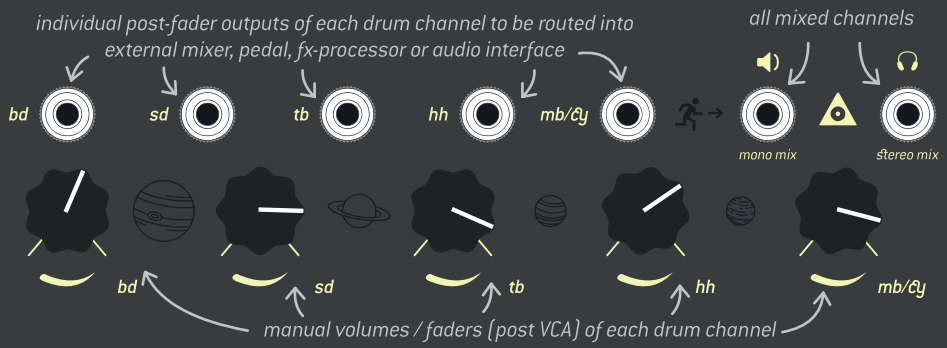


WILL YOU LOVE ME WITH MY DARK SIDE?

BLCK_NOIR's names for drum voices and controls have a certain resemblance to their acoustic counterparts, which is common for drum machines and synthesizers in general. We will provide parallels with the acoustic drum set to show where certain names came from. Just think of the BLCK_NOIR as a complete analog drum kit; limited in some ways, but capable of fully or partially supplying the rhythm section to your music in various styles - from electro to hip-hop, synth-pop, industrial or complex techno.

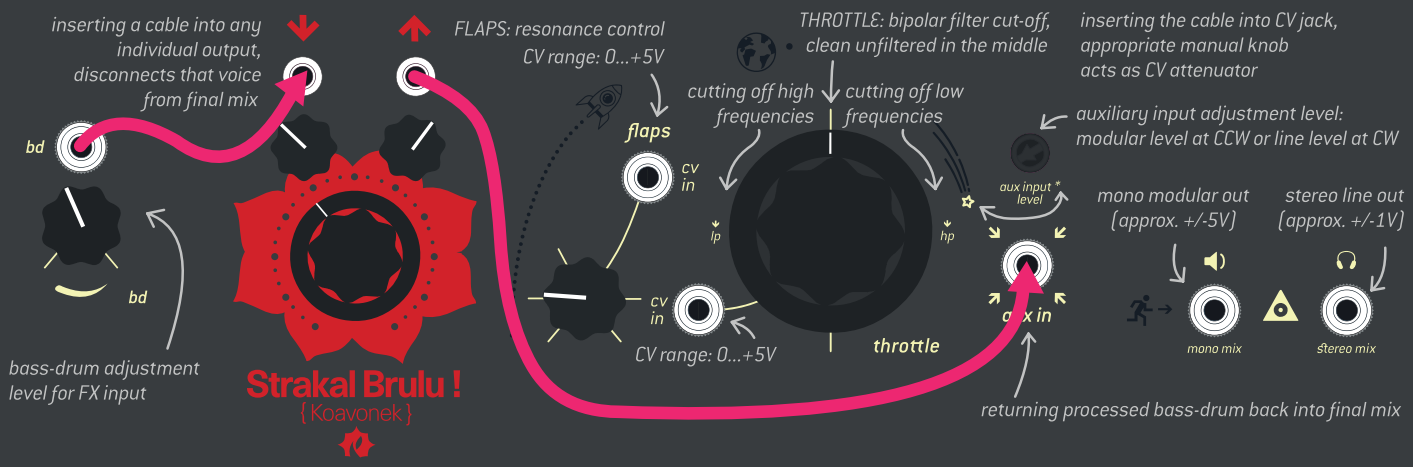
SHOW ME YOUR DARKNESS

Audio outputs are located at the top of the module:

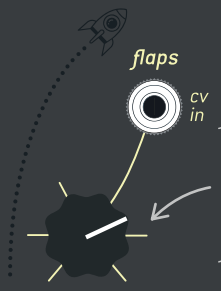


THROTTLE is a bipolar, DJ-isolator-style filter cut-off control that applies to the final outputs, mono and stereo. It is 12 db/oct zero-delay state-variable filter. Its sound is clean (or unfiltered) when the knob is in the middle, filters high frequencies (lo-pass) when turning the knob CCW, and filters low frequencies (hi-pass) when turning the knob CW from its middle position.

BE AWARE: *turning THROTTLE fully CCW or CW cuts off the low or high frequencies completely, which can result in complete silence in some cases.*



FLAPS is the resonance control of THROTTLE, and functions as a tone control for the output. Be aware: use FLAPS carefully: with higher values you may get a loud hi-frequency whistling sound that could damage your ears or PA. Filter controls THROTTLE and FLAPS influence only final outputs (and everything that is inserted into AUX IN), not separate outputs.

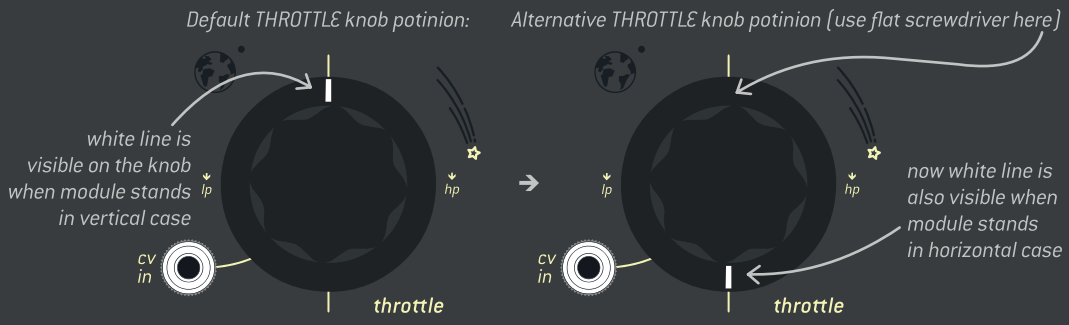


Be aware:
Flaps has an extra reserve for resonance amount and can be pushed to very extreme values. High resonance amounts will cause extra hum, then filter's self-oscillation, and as a result - high frequency whistle that may damage your ears or PA

I OWN TOO MUCH BLACK

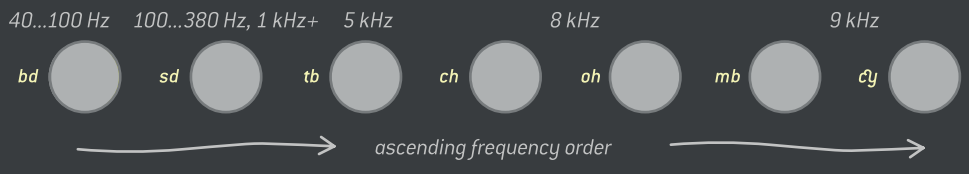
Connecting any cable into individual drum channels will disconnect them from final output. However, you can always return them to final mix output via AUX IN (auxiliary input). Small ***AUX IN*** trim knob defines the input level of mono auxiliary input. Route the signal here if you want to process it through the filter with final output exit. When the trimmer knob is fully CCW, the input of that filter accepts modular level of the signal – i.e. +/-5V (approx. +15dBu) with some reserve for extra gain. Signals that exceed the range of approx. +/-6.9V (approx. +19dBu) will be soft clipped or saturated to avoid clipping distortion. When the trimmer knob is fully CW, the input gain of the signal corresponds to an approximately 10 times higher source – i.e. a normal 1Vpp (+/0.5V) line-level signal with some reserve for the headroom. Keep in mind you can always decrease/attenuate the incoming signal level for accepting up to 0 or +4dBu, adjusting that knob when connecting professional audio electronics. You may also connect portable electronics directly (approx. -10dBV level) that has a 3.5 mm mono jack output, without needing to adjust the gain to a modular level. That input is also used to update the firmware of the filter/effect section.

I'LL STOP WEARING BLACK WHEN THEY MAKE A DARKER COLOR



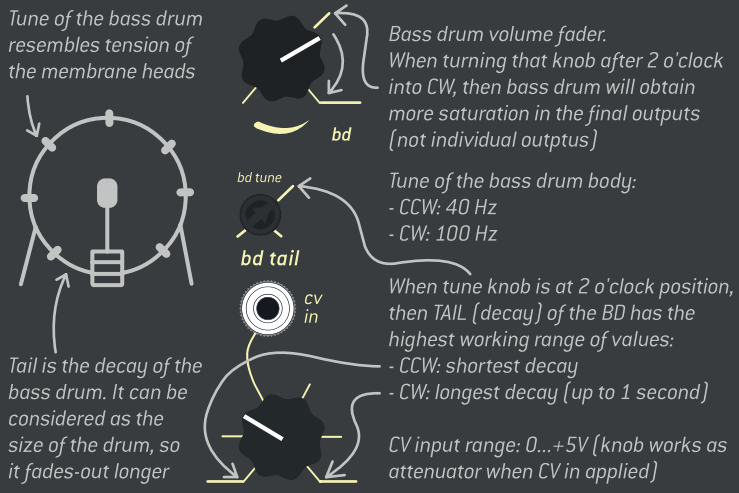
DARKNESS IS EVERYTHING

Drum voices are arranged in ascending frequency order from left to right. Each drum voice occupies a separate frequency spectrum. This way they don't overlap, and sound clean in the mix:



YOU WILL KICK ASS TODAY

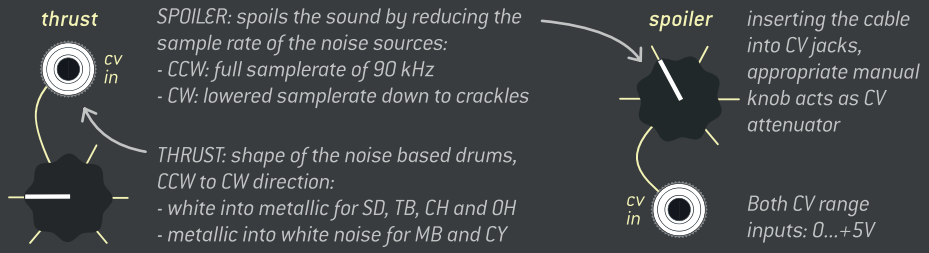
BASS, or KICK DRUM or BD is the lowest, deepest large drum that produces a sound of a specific pitch. It has two controls: tune and decay. Tune control is manual only: think of it as the tension of the heads. Because the Bass drum - together with the Snare drum - creates the backbone of the rhythm, Bass drum has more headroom than the other instruments. This reserve of amplitude increases especially after the volume knob crosses 2 o'clock, which causes extra saturation at final outputs:



DANCE TO THE BEAT OF YOUR DRUM

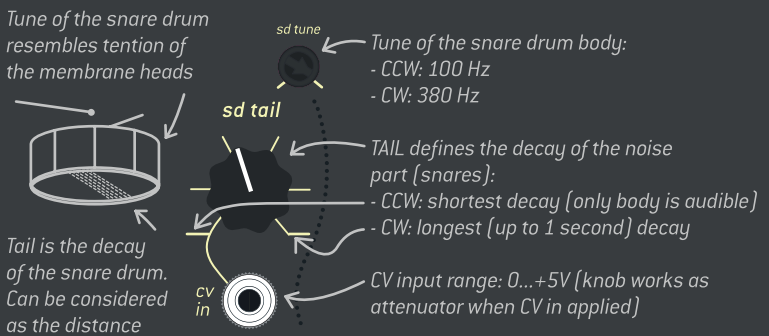
The other 6 drums ***(SD, TB, CH, OH, MB, CY)*** share two noise generators: white and metallic. The shape of those generators is adjusted with ***THRUST*** and ***SPOILER*** knobs:

These two controls are applied to all noise sources at once.



I WILL FOLLOW YOU INTO THE DARK

SNARE DRUM or SD produces a sharp staccato sound. Same as a real snare drum, it consists of two parts: the body (membranes or so-called heads), and a rattle of metal wires on the bottom head called the snares. Tune control is manual only: think of it as the tension of the heads. Decay of the snares has a CV input for modulation. If decay is at full CCW position, it's as if the strainer is disengaged: the sound of the drum resembles a tom because the snares are inactive. Decay of the body is fixed.



DO WHAT YOU WILT

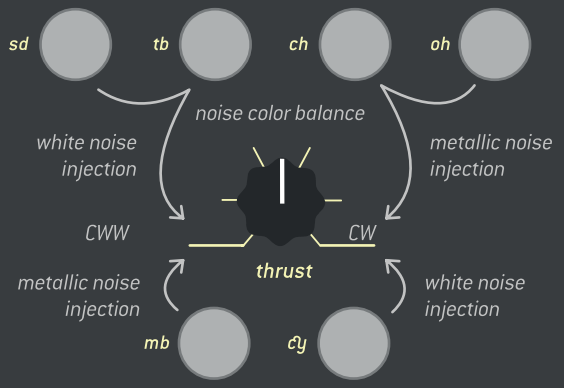
In the middle (at around 11-12 o'clock) snare decay becomes moderate. Together with body tune at full CW position, it creates the snappiest sound – according to our taste. Move the THRUST knob into CW direction and the snare obtains a unique metallic character, as if you hit the hammer on the anvil (hello, Judgment Day – score by Brad Fiedel). Crank the SPOILER into CW direction and the snare obtains dirtiness, and becomes akin to a clap sound, especially when mixed with tambourine. There is no pure clap sound in the BLCK_NOIR, because no one claps in hell.

DO YOU BELIEVE IN VOODOO?

The other 5 drum voices are pure noise-based.

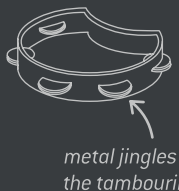
Tambourine, Closed and Open Hi-hats (by default THRUST at full CCW) are based on white noise, while Metallic beat and Cymbal are based on metallic noise injection. Rotation (or modulation with CV) of THRUST knob into CW direction shapes white-based drums into metallic ones, and conversely, metallic-based drums into white noise ones:

White and metallic noise sources are band-limited noise generators with a very high 90 kHz sample rate generation. This enables the sound spectrum to be pure, flat and without aliasing, especially when decreasing the sample rate with SPOILER knob into CW direction or modulating with CV.



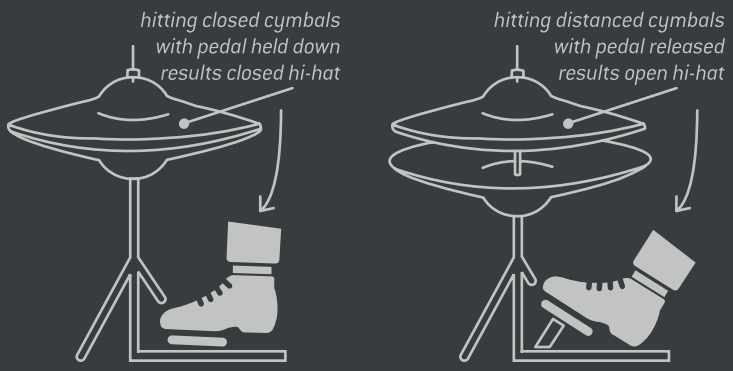
THROUGH THE DARKNESS OF FUTURE'S PAST

TAMBOURINE or TB is a percussive instrument with pairs of loose metal jingles – *called zills* - at the sides, played usually by shaking or striking with the hand. Tambourine adds a swing character to the rhythm, and plays an important role in the sound spectrum by filling the frequency range from snare to hi-hats. Alternatively, you can use it as a low-tuned open hi-hat or a kind of maracas.



IS HER SOUL TOO DARK FOR YOU?

CLOSE and OPEN HI-HATS or CH/OH is a combination of two cymbals facing each other and mounted on a metal stand. In a real drum set, striking the cymbals when they are in open position will produce the open hi-hat sound. Striking the cymbals while they are closed by holding the pedal down with your foot, will produce a closed hi-hat sound. Combination of these two sounds plays a major role in perception of tempo by enriching it with structure. The speed or division of how the hi-hats are played in the grid influences how slow or fast the rhythm sounds.



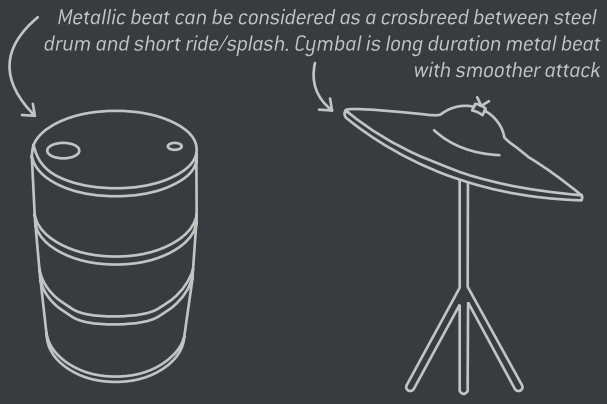
UP IN THE AIR [TONITE]

Since two cymbals are located on the same stand, they can't sound as open and closed hi-hats at the same time. Usually striking the cymbals and closing the pedal will produce a closed hi-hat sound. The same happens here: by playing the closed hi-hat right after striking the open hi-hat, the open one will shut off leaving only the closed one. We call this *hi-hat link*, and this feature can significantly animate your hi-hat line and make it more realistic.

In BLCK_NOIR the length of closed and open hi-hats is fixed. In fact, it was experimentally chosen to fit most music styles. Just in case you feel open hi-hat is too long for you sometimes: you can always mute it by playing a closed hi-hat a few steps after the open hi-hat. Both closed and open hi-hats share the same velocity channel, volume fader knob and individual jack outputs; they can't be separated.

HER DARKNESS, THAT'S WHAT MADE ME LOVE HER.

METAL or METALLIC BEAT or MB is an accent striking sound similar to steel drum. It has nothing to do with heavy metal music as the name is derived from its metallic nature. Because of the harshness it delivers, it brings fresh accents to your rhythm. A good example of using metallic beat is a song by Martial Canterel – 3 Days (from Sister Age (2004)). Usually a metallic beat voice can be used as rimshot or ride cymbal, or double the hi-hat line as was implemented in the original CR series, though in BLCK_NOIR it's separated into an individual voice.



HOPE IN THE DARK

CYMBAL or CY – is a longer-duration variation of the metal beat sound with less sharp attack. In a real drum set it stands somewhere among china, crash, splash or ride cymbals. Usually it is played in the climax parts of the music, or in the beginning of every verse or chorus right after the rhythm's fill variation - usually on the first step of the bar. Apart from the other drum voices, it is always good to have more sound variations in the music.

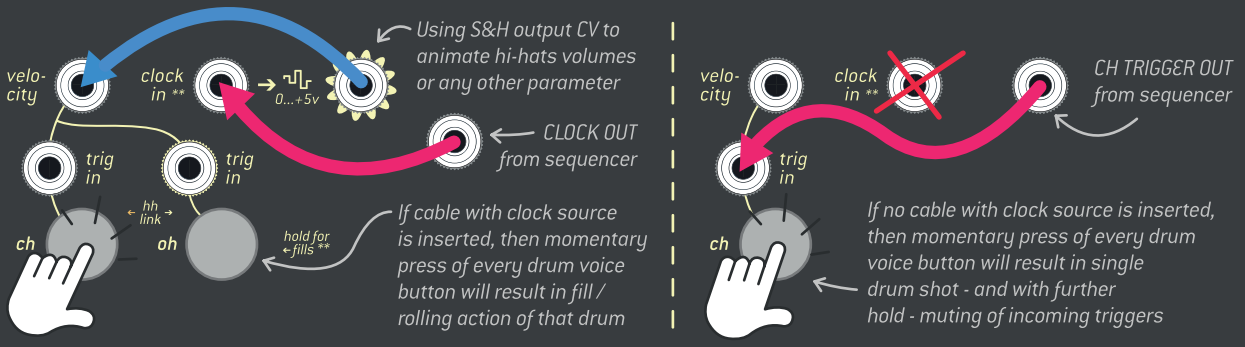
Metallic beat and cymbal share the same velocity channel, volume fader knob and individual jack outputs; they can't be separated.

IN THE DARK, TIME FEELS DIFFERENT THAN IN THE LIGHT

CLOCK IN ** is a special gate/trigger input (usually 0...+5V) that acts in two ways:

1. When a cable with clock source is inserted into CLOCK IN** jack, pressing one of the drum launch buttons will activate momentary fills/rolls of that drum voice, following clock's tempo: each pulse of the clock trigger will fire certain drum.
2. Provides clock for random *sample & hold,* which will generate a stepped CV signal on every clock step in a range from 0 to +5V. This is easy to apply instantly anywhere into modulation.

When no cable is inserted into CLOCK IN** jack, pressing one of the drum launch buttons launches that drum voice (drum shot preview). Additionally, holding down the button longer will disable input for that drum voice while you are holding it down. You can use this feature as a momentary mute. Just remember that the first button press will always trigger the drum voice, so time it right.



We recommend using the same synchronized clock from your sequencer to trigger the drums. Here are most usable clock rates, assuming your sequencer runs at common 24 PPQN (pulses per quarter note) division:

- PPQN/3: 1/32th
- PPQN/6: 1/16th
- PPQN/12: 1/8th
- PPQN/24: 1/8th

EVEN THE MOON HAS A DARK SIDE

Also, don't forget PPQN/8 (eighth note triplet) or make custom made trigger clips/tracks to dynamically vary fills/rolls of different speed.

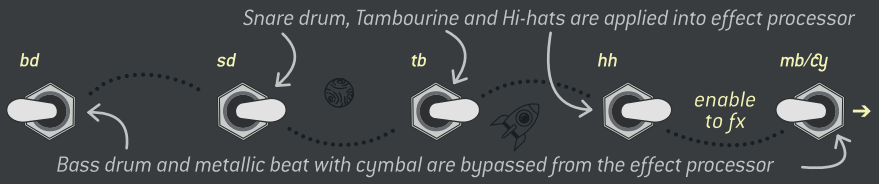
STARS CAN'T SHINE WITHOUT THE DARKNESS

CABIN PRESSURE EFFECT PROCESSOR has 8 effect types, identical to Grand Terminal's effects. New banks of effects, when available for download, can be uploaded via audio (see update procedure in the end of this manual).

Stock Grand Terminal effects (v2 Airways) recreate different ambient spaces and are arranged by size – going from bigger spaces (like halls) to smaller ones finishing with delays and freezer. The effect choice is entirely based on your musical taste and in most cases can dramatically change the overall sound of BLCK_NOIR, by helping to shape the drum voices.

SHINE BRIGHT LIKE A DIAMOND

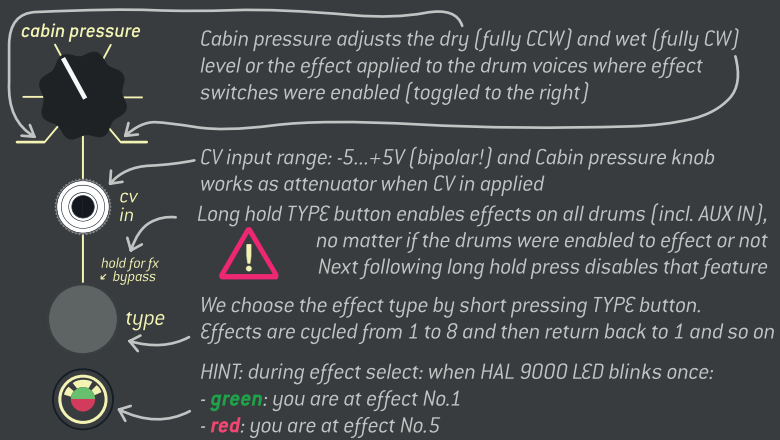
Each of the five drum voice groups can be separately routed into the effect processor by turning their toggle switches to the right position:



Turning its switch back to the left will bypass a drum voice group from the effect processor.

BACK TO BLACK

IMPORTANT: *holding the **TYPE** button for longer than 1 second will enable effects on all drum voices (including AUX INPUT!) no matter if they were enabled or disabled from the effect. Another long hold press will revert the effect only to those drums that have their switches enabled.*



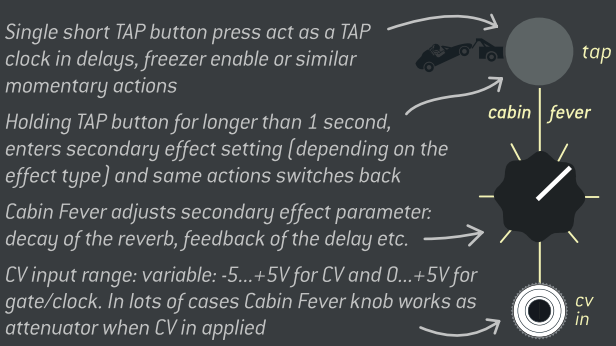
The effect type is selected by pressing the ***TYPE*** button in the cabin pressure area on the upper right corner of the module. The effects are cycled one by one (from 1st to 8th and then back to 1st and so on). In the current firmware version, there is no indication which effect is currently chosen, but there is a hint when you press TYPE button: when you press it and see ***HAL 9000*** LED blink GREEN once, you are at effect number 1. After 4 more presses the LED will blink RED once – you are now at effect number 5.

___ AND WHITE

Some effects work in true stereo, and some widen the stereo spread (which would not be audible in the mono output). Only one effect can be chosen at a time. The ***CABIN PRESSURE*** knob always defines the DRY/WET parameter of the effect. When the knob is fully CCW, then there is no effect at all: dry output only. When the knob is fully CW, then the signal will be fully processed with the effect: 100% wet. Adjusting that knob is a balance of how the sound is processed: think of it as opening the window to get some fresh air – you may open it only a bit for some ventilation, or fully open it to get lots of fresh air. The corresponding CV IN jack is a CV control for the dry/wet parameter. It accepts BI-POLAR -5v...+5v voltage and when the plug with CV is inserted (3.5mm MONO jack), the CABIN PRESSURE knob acts as an attenuator for that incoming CV.

BLACK IS MY HAPPY COLOR

Each effect has a few additional parameters. These parameters are defined by the CABIN FEVER knob, corresponding to the CV IN jack and a TAP button. Depending on the effect, these controls are assigned to different parameters as described below.



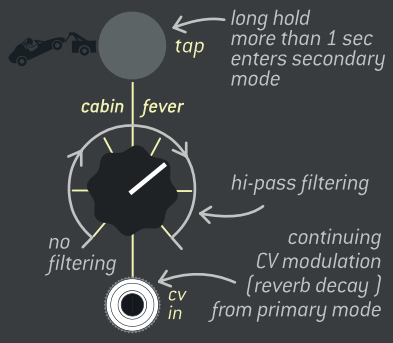
DOWN THE RABBIT HOLE

Pressing and holding the ***TAP*** button longer than 1 second activates the secondary mode for the CABIN FEVER knob. The HAL 9000 LED will blink RED once, to show that you are in secondary mode. Press and hold the TAP again for around 1 second and you will notice the HAL 9000 LED will blink GREEN once meaning you are back in primary mode.

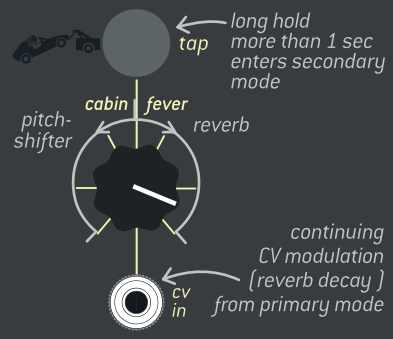
WELCOME TO THE DARK SIDE

Stock v2 Airways effects:

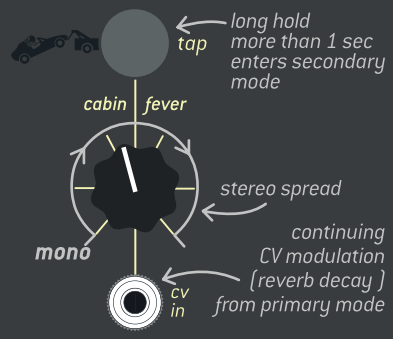
1. ***HALL REVERB*** is a very clean space effect that may create an extremely large - up to almost infinite - ambience. The CABIN FEVER knob defines the decay of the reverb, or in other words, can be considered as the hall size. At full CW position the sound will sustain up to infinite, while fully at CCW only the effect of a small room will be heard. Don't forget to adjust CABIN PRESSURE simultaneously to have a proper balance for your sound. Holding TAP for longer than 1 second enables the secondary function for CABIN FEVER knob. The amount of decay - primary parameter of the CABIN FEVER knob - will be stored and the CABIN FEVER knob will adjust the amount of fixed HI-PASS filter at the input of the reverb (only manual control, no voltage control). The hi-pass filter is an essential tool within almost any reverb to cut off low frequencies and have more 'air' in the final output without the 'boomy' low frequencies. Be aware: after applying too much hi-pass filter to the reverb, you will hear almost no reverb effect when you play Bass drum sound send to effect. By default, after firmware/bank update, this hi-pass filter cuts only a bit of low frequencies until you adjust it manually with the secondary CABIN FEVER function. Then that parameter is stored in the memory.



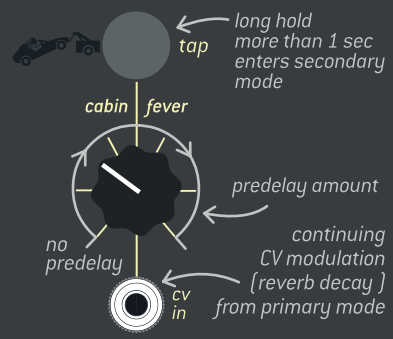
2. ***SHIMMER REVERB*** is a variation of the hall reverb, with a pitch shifter in the reverb feedback loop, which creates weird, choir-like, huge and unrealistic spaces. The primary CABIN FEVER function defines the decay of the reverb and the secondary function defines the amount of pitch-shifter mixed into original reverb. This means: no pitch-shifter at the fully CCW position of the CABIN FEVER knob, half-and-half in the middle, and pitch-shifted mix only at fully CW position. By default (or after resetting the module) this secondary parameter is set with an approximate ratio 40%/60% of shimmer/reverb until you adjust it manually with the secondary CABIN FEVER function.



3. ***STEREO ROOM REVERB*** uses four all-pass filters in series and eight parallel Schroeder-Moorer filtered-feedback comb-filters to recreate a sort of stereo (room) ambience. The CABIN FEVER defines the DECAY of the reverb, or again, adjusts the room size. The Secondary function (holding TAP for longer than 1 second) defines the stereo spread of the reverb, from mono (fully CCW) up to a huge stereo spread. By default (or after resetting the module) this spread is cranked up fully until you adjust it with secondary CABIN FEVER function. This change is audible when you use the stereo output from the BLCK_NOIR module connected, e.g. to your headphones or speakerphones.

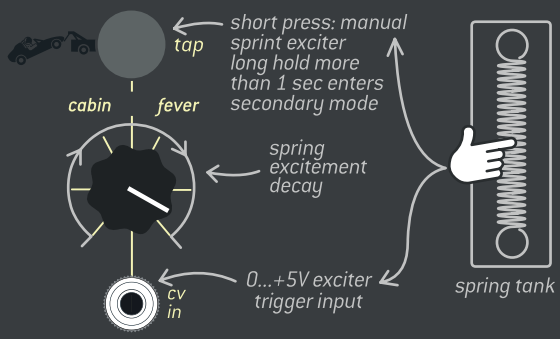


4. ***PLATE REVERB*** has a distinct sound that recreates picked up vibrations of a big metal sheet driven by an electromechanical transducer. It is one of the first digital reverb simulation approaches ever made. It suits various music genres, vocals and drums, ranging from a subtle effect up to an infinitely sustained ambience. The primary CABIN FEVER function defines the decay of the reverb. In real life this is the distance from the pickups to the metal plate, and defines how long the tail of the reverb is present. Secondary parameter defines the amount of pre-delay to psychologically distant sounds in ambience. By default (or after firmware/bank update) the pre-delay is set to maximum, until you adjust it manually with the secondary CABIN FEVER function.

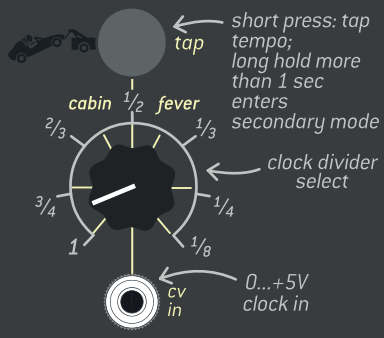


I FEEL COMFORTABLE IN BLACK

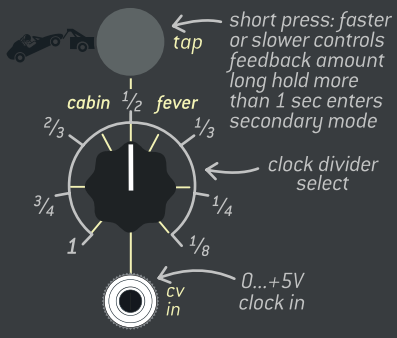
Next 4 effects fromslot 5 to 8:



5. ***SPRING REVERB*** gets its unique sound from the diffusion in the metal spring, because higher frequencies travel more slowly through the spring than lower ones. The CABIN FEVER knob, as usual, defines the decay of the reverb. We also implemented a unique feature: with the TAP button you can simulate a sound as if you pluck the real spring with your finger. That gives the distinct exciting spring reverb sound we all love so much. The Secondary function of the CABIN FEVER is tied to the TAP button's 'pluck the spring' feature and defines the DECAY of how fast the spring will calm down after manually plucking it. The spring plucking may be done manually by using the TAP button or by applying a trigger into the CABIN FEVER CV input while being in secondary function. By adjusting the decay to the maximum value, the spring sounds long (up to infinite) with a small self-oscillation. Keep that in mind when you select this effect.



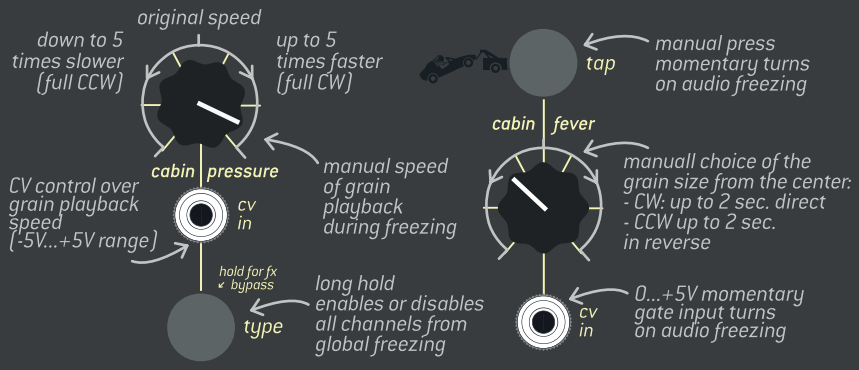
6. ***PING-PONG DELAY*** is a recreation of a stereo delay with the rate of repeats controlled by a manual tap or by a clock. A 'tap' is usually three or more short clicks in a row on the TAP button, after which the repeats of the delay follow the tempo you have tapped. Double internal down-sampling allows the delay to sustain up to a maximum of 2 seconds. The primary CABIN FEVER parameter defines the feedback of the delay – i.e. how much sound goes into the feedback loop to be repeated. At full CW knob position, almost no new incoming sound comes to the feedback loop and the sound regenerates itself infinitely. The secondary CABIN FEVER parameter defines the clock division of the incoming tap/clock. These taps/clock come either from the manual TAP button or from the CV IN jack. The CV IN jack becomes a 0..+5V trigger input in that mode. In the secondary mode the CABIN FEVER knob range is divided into 6 sectors that correspond to divisions: 1, 3/4, 2/3, 1/2, 1/3, 1/4, 1/8. Clock division change is possible during new taps, and is saved after you switch to the primary mode. Some pitch-shifting artefacts may arise during changing the divisions; just wait a few seconds until the delay buffer is fully emptied/renewed and you will have a proper tempo calibration. If the total tap applied (after division) is longer than the maximal time delay can handle, then the maximal tap tempo is set. Since this is a stereo delay, all taps affect the left and right channel.



7. ***TAPE ECHO*** is a recreation of Variable Tape Speed Echo machines with 3 fixed playback heads – inspired by the Roland RE-201 Space Echo, with a warm saturation emulation. With double internal downsampling, the total delay time is around 1.4 seconds from the initial echo input until the output of the third delay. The overall time is spread over all three tape heads/delays, that's why the total 1.4 seconds may be audible as 480ms delay. In primary mode, the CABIN FEVER knob defines the delay repeat rate (speed of the tape). Bipolar +/-5V CV input applied (i.e. an LFO) to the CABIN FEVER CV input, using the knob as attenuator, may create interesting detuned audio effects. The tap button works in a limited frequency range of manual tapping, and defines the INTENSITY (number or repeats, or feedback) of the delays. The faster you tap, the longer the decay (delay tail) you obtain. The secondary CABIN FEVER parameter works as a divider for the incoming clock (into CV IN jack) or by using manual taps with the same dividers as in Ping-Pong delay described above.

WEATHER FORECAST FOR TONITE: DARK

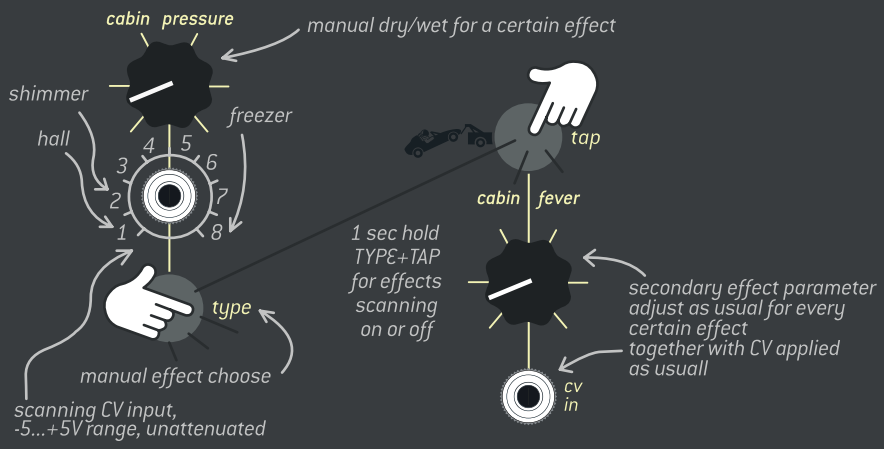
8. **FREEZE** effect: when the tap is pressed (or fever CV gate is on), the audio is looped by the grain length of CABIN FEVER knob and by speed defined by CABIN PRESSURE knob or CV applied. An updated version of the freezer is available which works in both directions: in the middle of CABIN FEVER knob the granule size is the smallest. Turning the knob CW will increase the granule size; turning CCW will do the same thing, but the granule will be reversed.



EVERBODY HAS A DARK SIDE

	EFFECT	PRIMARY 'CABIN FEVER' ACTION	SECONDARY 'CABIN FEVER' ACTION	TAP BUTTON
1	HALL REVERB	Decay of the reverb	Hi-pass filter at reverb input, by default set to 50%	Long hold: entering secondary function
2	SHIMMER	Decay of the reverb	Pitch-shifter vs reverb mix, by default set to 40/60%	Long hold: entering secondary function
3	ROOM	Decay of the reverb	Room stereo spread, by default set to maximum	Long hold: entering secondary function
4	PLATE	Decay of the reverb	Pre-delay amount, by default set to maximum	Long hold: entering secondary function
5	SPRING	Decay of the reverb	Decay of spring excitement from TAP button or incoming by CV IN clock, by default set to maximum	Short press: spring excitement. Long hold: entering secondary function
6	PING-PONG DELAY	Delay's feedback amount	Divider for delay's frequency from TAP button or incoming by CV IN clock, by default set to 1/1 (max length)	Short press: tap tempo Long hold: entering secondary function
7	TAPE ECHO	Tape speed	Divider for delay's feedback from TAP button or incoming by CV IN clock. By default set to 1/1 (max length)	Short press: tap for feedback Long hold: entering secondary function
8	FREEZER	Granule size (bipolar)	none	Short/long momentary press: freezing enable

YOU WILL HAVE NIGHTMARES FOREVER



CABIN PRESSURE SCAN: by pressing and holding the ***TYPE + TAP*** buttons simultaneously for longer than 1 second, you enable the effect type change under incoming CV. Every effect type has a memory, so the values of every parameter are stored and then immediately recalled under incoming CV for a certain effect type. In that mode, the CABIN PRESSURE parameter is no longer CV controlled and works only as a manual DRY/WET control. The CV input for CABIN PRESSURE accepts bi-polar -5...+5V CV signal and changes the type of effect under incoming CV. The range of -5...+5V is divided into 8 zones (with adjusted hysteresis range) with approx. 1.25V per step. If the incoming CV is from -5V to -3.75V, then the first effect type is chosen. If the CV is in the range from -3.75 to -2.5V, then the second effect is chosen and so on, up to the 8th effect.

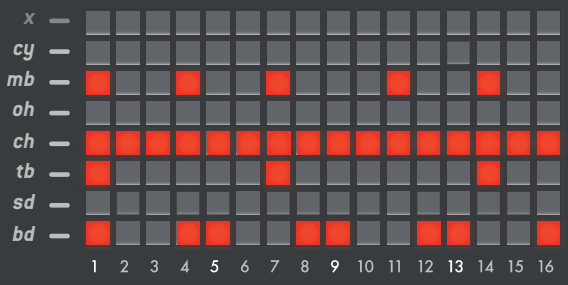
NOT A NIGHTMARE IF YOU KNOW WHAT YOU ARE DOING

IMPORTANT: Because the DSP in the module can only handle loading one effect at once, very fast scanning of effects may cause clicks. There are small crossfades in volume during effect transitions, and we tried to minimize the clicks as much as possible, but they cannot be fully eliminated.

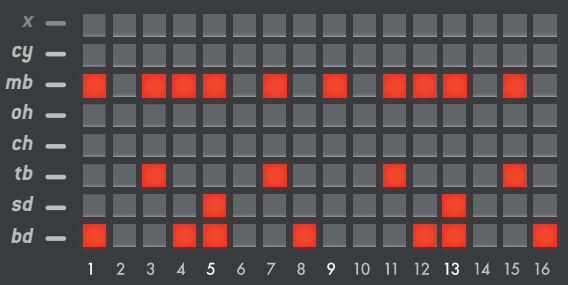
NIGHT ENDED, NIGHTMARES DIDN'T

Making a proper drum rhythm for beginner most likely will be a trial and error process. Expertise comes with practice and choosing proper programming methods. Below are typical rhythms in various music styles using BLCK_NOIR drums on example of Winter Modular Eloquencer grid. Track A (most top one) is marked as ***X*** and isn't filled with anything on the pictures. We recommend to put there some CV control or, what is even more interesting – put triggers/gates with different ratcheting options and apply that triggers into CLOCK IN** of the BLCK_NOIR to have various tempo divisions (1/8, 1/16, 1/32) on fills buttons press.

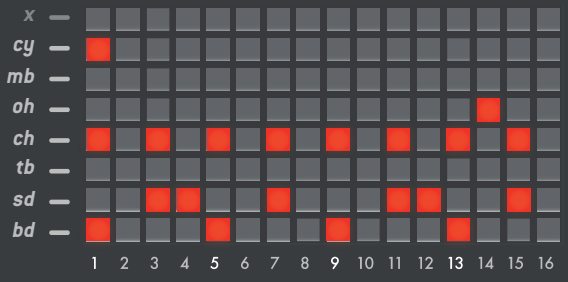
Bossa nova



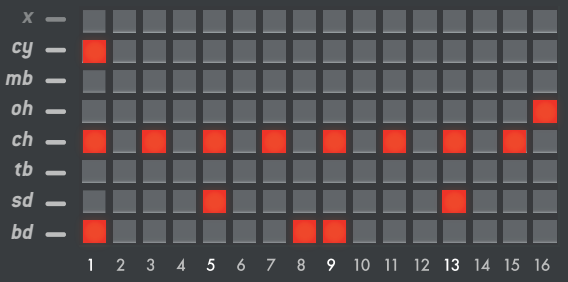
Cha-cha-cha



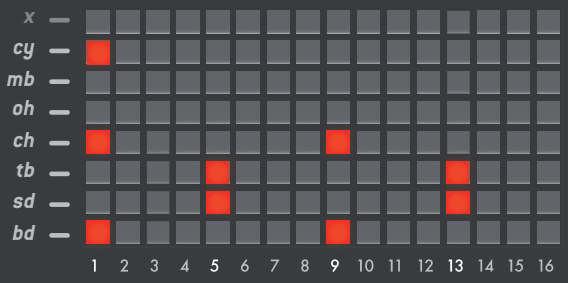
Enka



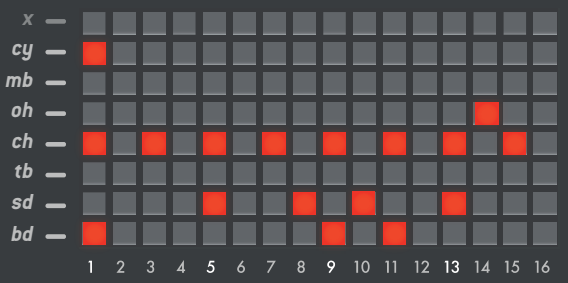
Rock 1



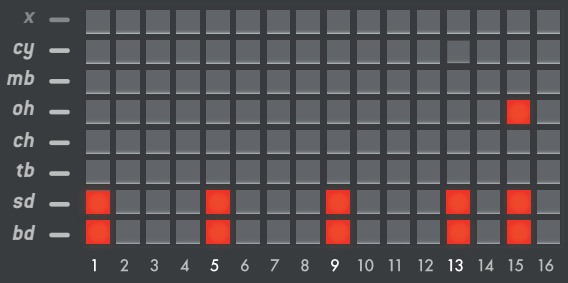
Foxtrot



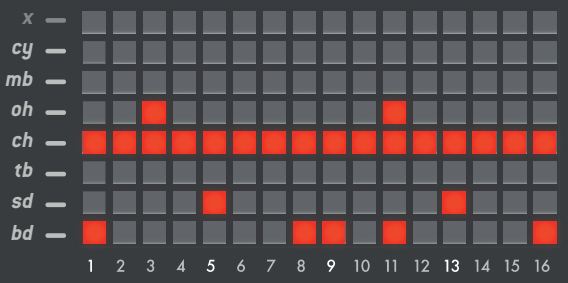
Rock 2



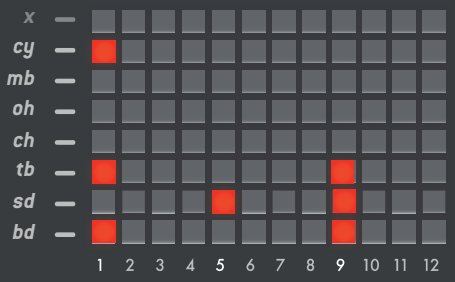
Tango



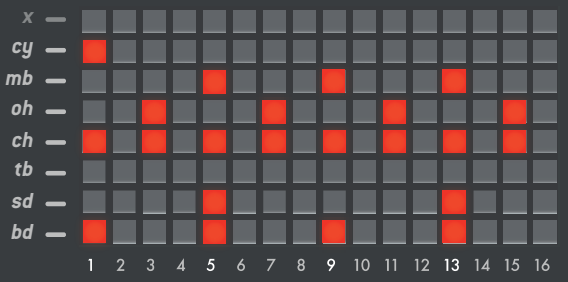
Rock 3



Waltz



Dance 4/4



MY DARK PASSENGER MADE ME DO IT

FIRMWARE/EFFECT BANKS UPDATE. We continuously work on new effects and improvements, as well as on bug fixes. It is recommended to have the latest firmware installed to experience the latest features.

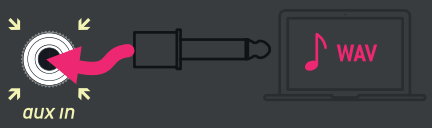
In case of finding bugs or offer improved/new functionality, please report to e-mail: ***beta@endorphin.es***

http://airways.endorphin.es

Download latest firmware/bank for BLCK_NOIR when available at: http://airways.endorphin.es

Power OFF you modular system:

With simple mono or stereo cable connect audio output from your computer audio output to AUX IN input of the module



Hold TAP while powering your system again:

You will see all HAL 9000 LED will slowly blink green like LFO:

Press PLAY and wait 1.5 minutes. The modue will reboot automatically with new firmware installed

Don't play any drum sounds during update process. When HAL 9000 LED flashes RED - that means signal is too low or too high - just repeat the process regulating the level with AUX TRIM knob

HOW DO YOU DESTROY A MONSTER WITHOUT BECOMING ONE?

During BLCK_NOIR development, we got inspired and discussed things with lots of beautiful people. We thank you all for your input – without you BLCK_NOIR would not exist the way it is now (in alphabetical order):

- Andrew Huang (Andrew Is Music)
- Ben Wilson (DivKid)
- Danni Kim (Binary Society)
- Derrick Estrada (Baseck)
- Jónatan Bernabeu (n^3)
- Kim Bjørn (Bjooks)
- Leonardo Mirabal (insula.me)
- Marshall Goppert (Nero Bellum / Psyclon Nine)
- Nicolas Bougaïeff (Novamute)
- Paul Chambers (@theworldofpaul)
- Ramiro Jeancarlo (Staccato du Mal)
- Sean McBride (Martial Canterel)
- Todd Barton (@synthtodd)
- Tony Garrucho (Tony Verdi)

ENDORPHIN.ES † COVEN