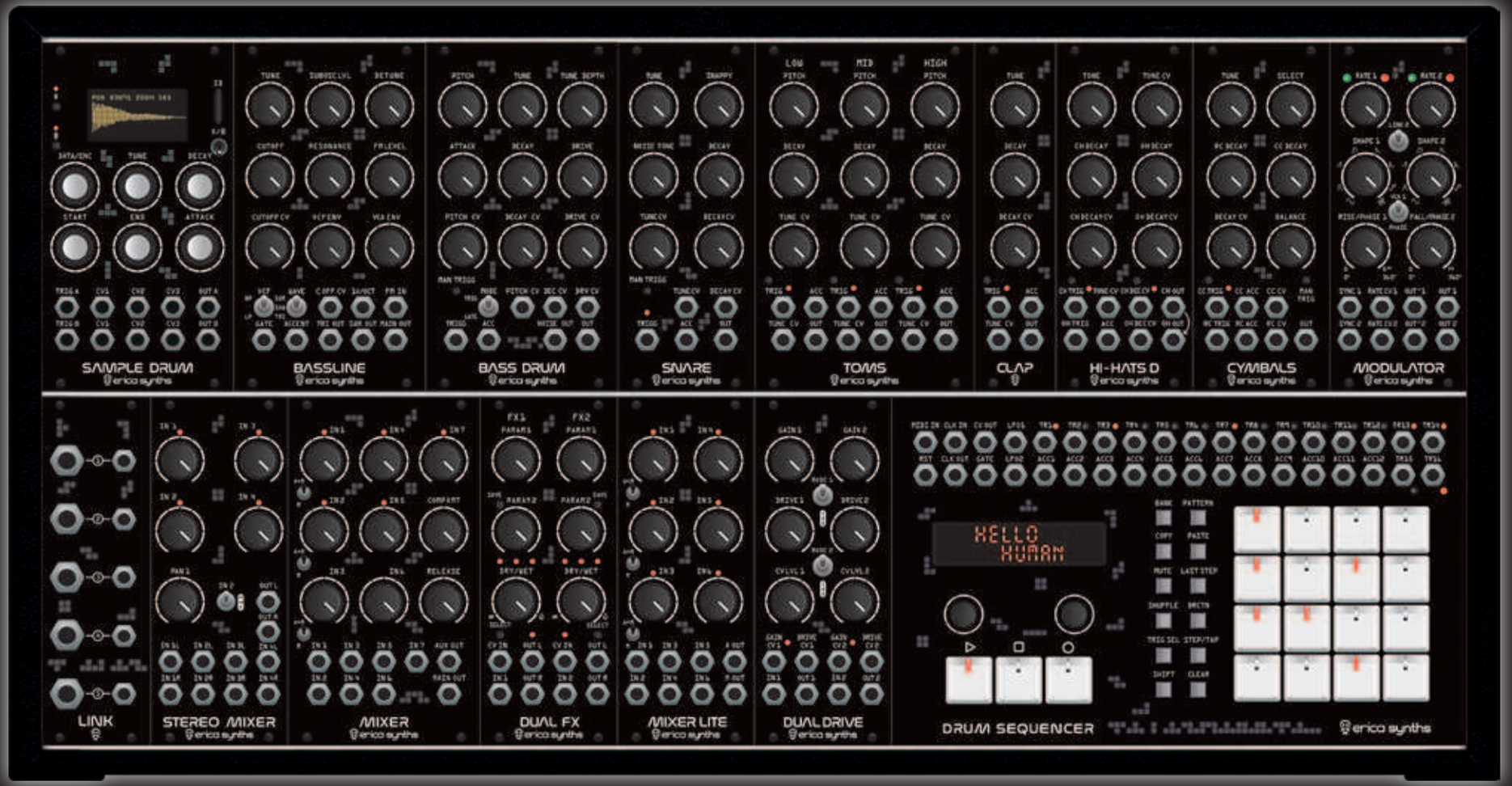
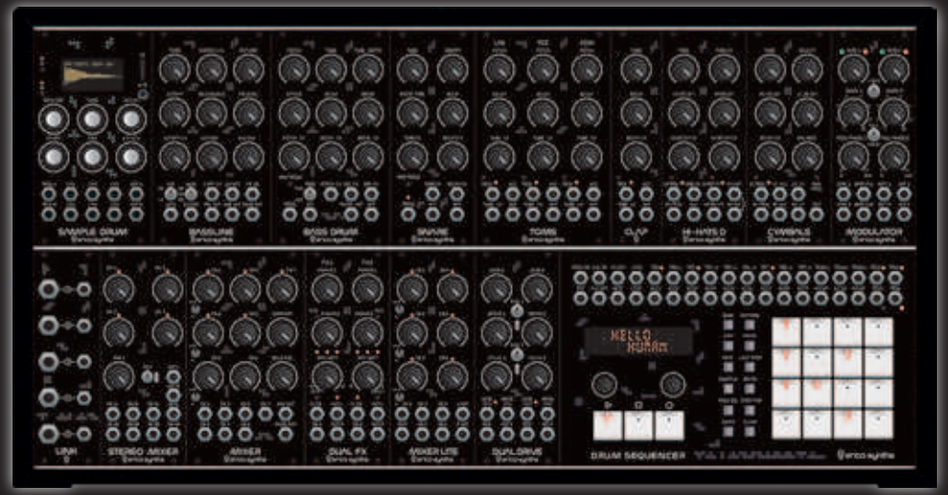


erica synths

TECHNO SYSTEM

User manual
and
patch book

WHAT YOU GET:



• Erica Synths Techno System in a travelcase with a lid containing 16 modules.
The modules are internally patched to the sequencer, so they receive Trigger and Accent signals even without patching relevant patch cables.

ERICA SYNTHS TECHNO SYSTEM SPECIFICATIONS

Power supply,,,,,,,,,,,,,,,,,,,,,,,,,universal 110-240VAC - 12VDC adapter
Power consumption.....1,5A
Dimensions (W × D × H).....550x280x140mm
Mass (with lid).....7,55 kg (excluding PSU)

Specifications and appearance are subject to change without notice for improvement.



• External PSU module and mains cable with a connector used in your country.
It's universal PSU, so you can use it all over the world only replacing mains cable.



• 20 patch cables



• User manual which contains pages for your patch notes



• Wrench key

ERICA SYNTHS TECHNO SYSTEM

Thank you for ordering Erica Synths Techno System!
It is the ultimate tool for techno/industrial/dnb production and live performances. With bit of imagination you'll find that it's not limited to specific music genres — it just depends on your creativity in patching, settings of modules, what samples are used in Sample Drum and how they are triggered. The potential is unlimited!

Erica Synths Techno System contains following modules:

Sample Drum – is the sample player that reads samples from a SD card and allows you to slice up loops directly in your modular system and rearrange them to taste, add FXes and save presets for live performances. Thanks to the module's dual-channel concept, two loops can be combined. A total of six CV inputs guarantees lively results

Bassline – full analogue synth voice module for ultimate basslines and leads. It features AS3340 VCO with three waveforms, a filter inspired by Erica Synths Acidbox and unique features – transistor-based suboscillator and two BBDs that emulate VCO detune.

Bass Drum – takes classical drum machine kick drum sounds to the next level with a modular functionality - more parameters and CV control.

Snare Drum – 909 inspired sound with with modular functionality in mind – CV controls and Accents will add lot of expression to your performance

Toms - the module contains Low Tom, Mid Tom and High Tom, each with individual Pitch and Decay controls and outputs plus CV control over pitch.

Clap - brings classical drum machine sounds in eurorack. Accent and CV control over tune adds more versatility in sound.

Hi-Hats D – classical Hi-Hats samples are passed thru AS3330 based VCA with adjustable shape and controlled via envelope generators of unique design. Extra feature is Open HiHat looping – when it's on, a certain part of the sample is looped while the envelope decay is on, thus creating distinct, delay-like effect.

Cymbals – distinct topology digital/analogue module, where cymbal samples are passed thru AS3330 based VCA and controlled via envelope generators of unique design. The module features 10 sets of custom Crash and Ride cymbal samples with Tune control and individual Decay control.

Modulator features two identical syncable to the BPM LFOs/noise sources with selectable morphing waveshapes. LFO frequency can be manually adjusted or CV controled, as well as they provide frequency divisions and multiplications in Sync mode. Each LFO has two outputs — main one and secondary one with adjustable phase, so you can create evolving modulations

Drum Sequencer is an ultimate modular drum sequencer with 16x trigger outputs, 12x Accent outputs, 1x CV and Gate track and 2x Synced or free running LFO outputs.

Mixer Lite is a compact 6 input version of a Drum Mixer. Built in vactrol based compressor settings can be adjusted to a taste via trimpots through the front panel.

Dual Drive features two independent distortion circuits with gain and overdrive parameters, each with three overdrive flavours. Thanks to CV inputs, it is possible to create very lively distortion and great stereo effects.

Dual FX combines two Spin FV-1 chips in one module, each filled with eight custom effect programs with two adjustable and CV controlled parameters per effect and analogue dry/wet circuit. The effects repertoire of the Dual FX has been specially tailored to drum sounds and all parameter settings can be saved with the effect.

Drum Mixer – compact, 7 input mixer of unique design provides greater dynamic range and built in vactrol based compressor for high clarity of each drum sound in the mix. The first three inputs have selectable allocation - to the Main output or Main output + Aux Send

Stereo Mixer comes equipped with four channel strips, each containing two inputs (L / R). Thanks to some clever routing options, mono signals can be placed nicely in the panorama as well. All four stereo channel strips feature a level potentiometer and a limiter provides protection against very hot signals.

LINK is the module that bridges eurorack to stage mixers — it has 5 sections that attenuate eurorack signals to line level signals and send them to 6,3mm jacks for quality connection to the performance mixer.

Please, refer to user manuals for each module below!

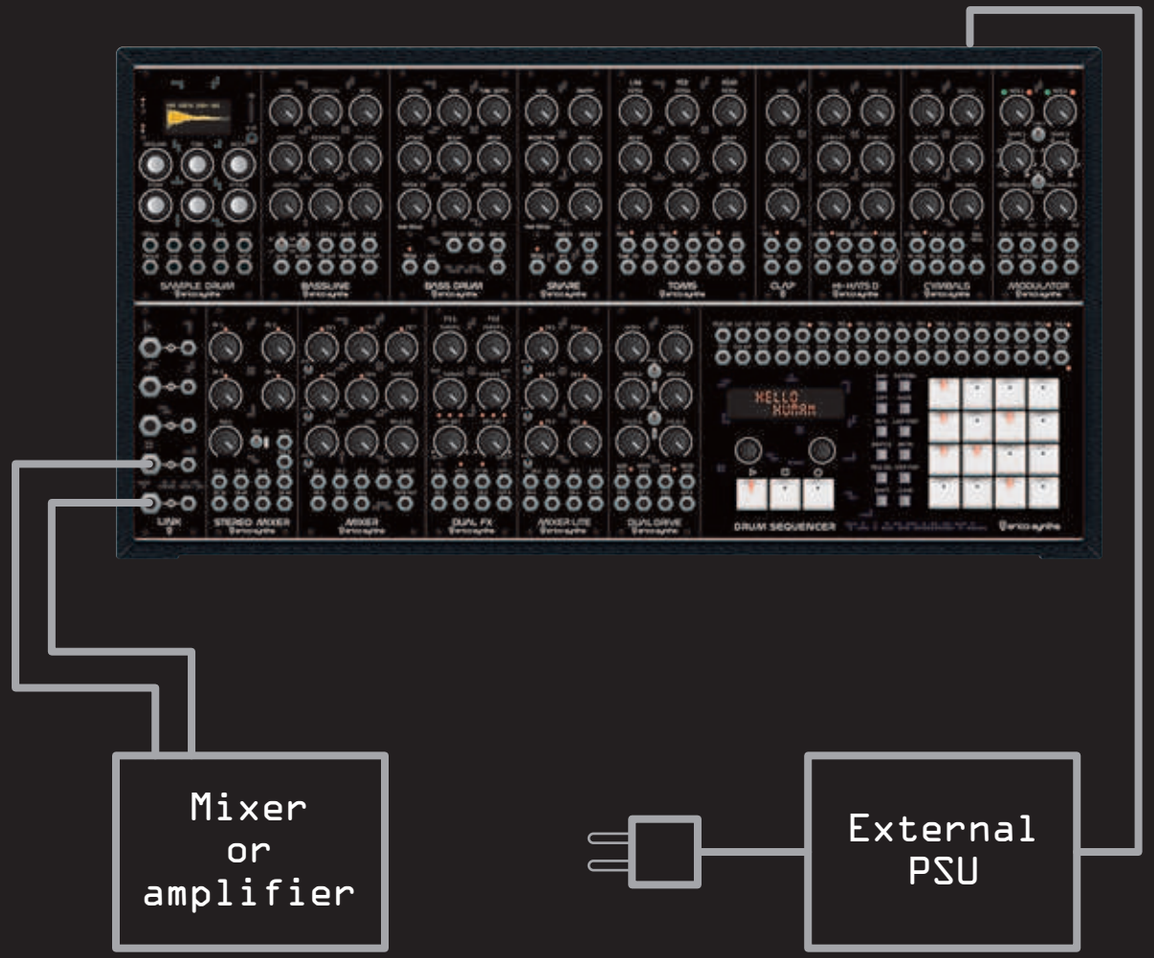
QUICK STRAT

The Techno System is plug and play! Connect the power connector cable, connect the LINK module to mixing console or amplifier using 6,3mm cables (not supplied with the Techno System), flip the power switch and start patching!
Note that you can use the internal mixers for mixing sounds, as well as send individual drums to the mixing console via LINK module.
In order to keep a setup more clean and easy to control, the system comes internally patched with the Trigger and Accent cables leading from the Sequencer to the modules, so you must take care only about audio and modulation patch.
Once a trigger is selected, a sequencer will indicate relevant drum voice on the OLED screen. Nevertheless, you can still use patch cables for triggers and accents. In that case internal patch will be interrupted and replaced by one with patchcables.
Also if you don't want to see trigger labels, but instead see the trigger channel you can exit the "Techno System" mode by holding down 13,14,15,16 step keys while booting up the system.

Internal connections and relevant representation on the screen are:

TR1	BASS DRUM	BD
TR2	SNARE DRUM	SD
TR3	SAMPLER 1	S1
TR4	SAMPLER 2	S2
TR5	LOW TOM	LT
TR6	MID TOM	MT

TR7	HI TOM	HT
TR8	CLAP	CP
TR9	CLOSED HAT	CH
TR10	OPEN HAT	OH
TR11	CRASH CYMBAL	CR
TR12	RIDE CYMBAL	RD



Please, refer to the patch examples below!

TUNE

Set the initial tune of the VCO

SUBOSC LVL

Add some power to the sound! Turning the suboscillator level knob CW simultaneously adds one octave down transistor-based suboscillaotr and opens dedicated LP filter, so the suboscillator fades in gently and reveals its real character at full CW setting

DETUNE

Detune function emulates sound of the synh with several detuned VCOs. Two BBD lines act as a frequency shifter and a resulting signal is mixed with the original one. Turning the Detune knob CW also increases frequency of the LFO that controls BBD lines, so at full CW setting you get quite an FM madness

CUTOFF

Control the VCF cutoff manually. With cutoff CV applied (from VCF envelope and/or external), you'll need to adjust initial cutoff for acid bassline sweetspots

RESONANCE

Adjust the VCF resonance! The filter used in the module is the same as on AcidboxIII, and it's capable of extreme resonance sweeps. Mind your speakers!

FM LEVEL

This is external FM level attenuator. You can also do some self-modulation by patching TRI OUT in to FM IN and increasing FM level. Enjoy!

CUTOFF CV

Adjust VCF cutoff CV level! If nothing is patched in C OFF CV input, it adjusts VCF envelope impact on the cutoff

VCF ENV

Adjust the VCF cutoff envelope decay time

VCA ENV

Adjust the VCA envelope decay time. Full CW setting will open the VCA even the gate is not present

VCF

Select the VCF mode

WAVE

Select the VCO waveform that is sent to the master output

C OFF CV

This is an external CV input to control the VCF cutoff

1V/OCT

This is the VCO 1V/oct input. It tracks well over 9 octaves

FM IN

This is the VCO FM input

GATE

This is the Gate input. It accepts gate from any sequencer and sends it to the VCF and VCA envelopes simultaneously

ACCENT

This is the Accent input. +10V CV will increase the volume and open the VCF slightly to an expression to the bassline

MAIN OUT

This is the main output of the module

TRI OUT

These are additional VCO outputs, and they are not affected by VCF and VCA. You can use them as additional sound sources that are in tune with your bassline



PITCH
Set master pitch of the Bass drum

TUNE
Set decay time of the pitch envelope

TUNE DEPTH
Adjust the depth of pitch envelope

ATTACK
Set the volume envelope attack time. Like on the classical drum machines full CW setting gives the sharpest attack

DECAY
Set the volume envelope decay time from very short to overlapping base roars

DRIVE
Adjust the overdrive level of the drum sound form none to extreme

DECAY CV
These are CV attenuators of relevant CV inputs

MAN TRIGG
Use the manual trigger button to check the bass drum settings and add some beats during live performance

DECAY CV
These are CV inputs to control Pitch, Decay and Drive

TRIGG
This is the Trigger input
The LED indicates incoming triggers

ACC
This is the Accent input. +5V CV will increase the volume of the drum and add an expression to the bassdrum track

OUT
This is the output of the module



TUNE
Set master tune of the Snare drum

NOISE TONE
This knob adjusts noise filter cutoff, so you can set desired noise tone

MAN TRIGG
Use the manual trigger button to check the snare drum settings and add some triggers during live performance

TRIGG
This is trigger input. The LED indicate incoming trigger

ACC
This is the Accent input. +10V CV will set the Snare Drum to the maximum volume

SNAPPY
Snappy knob allows you to fade between tone and noise

DECAY
Set the decay time of the noise

TUNE CV, DECAY CV
These are CV attenuators of relevant CV inputs

TUNE CV IN, DECAY CV IN
These are CV inputs to control Tune and Decay

OUT
This is the output of the module



PITCH
Set the initial pitch of each Tom manually!

DECAY
Adjust decay time of each Tom

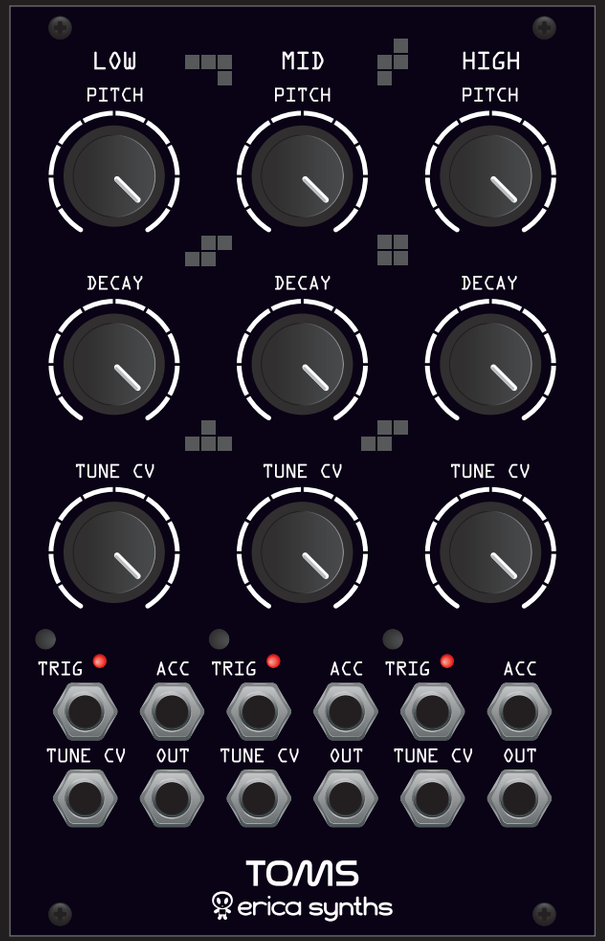
PITCH CV
These are pitch CV attenuators

TRIG
Use the manual trigger buttons to check the toms settings and add some triggers during live performance

TRIG IN
These are the Trigger inputs. The LEDs indicate incoming triggers

ACC
These are the Accent inputs. +10V CV will set the tom to the maximum volume.

OUT
These are the outputs of each tom



TONE
Set master tone of the Clap

DECAY
Set the decay time of the clap noise

TONE CV
This is Tone CV attenuator

TRIG
Use the manual trigger button to check the clap settings and add some beats during live performance

TRIGG IN
This is the Trigger input. The LED indicates incoming triggers

ACC
This is the Accent input. +10V CV will set the Clap to the maximum tone

TONE CV
This is Tone CV input

OUT
This is the output of the module



TUNE

Set the master Tune of Hi-Hats. This affects both Hi-Hats simultaneously, and essentially controls the sample playback rate

TUNE CV

This is Tune CV level attenuator

CH DECAY

Adjust Closed hat decay time manually

OH DECAY

Adjust Open hat decay time manually

DECAY CV

This is Decay CV level attenuator. It effects both HiHats simultaneously

VCA SHAPE

Adjust the VCA response from sharp, aggressive full CCW (logarithmic setting) to smooth and long decays full CW (linear setting)

Use the manual trigger buttons to check the Hi-Hats settings and add some beats during live performance

CH TRIG, OH TRIG

These are Trigger inputs. The LEDs indicate incoming triggers

TUNE CV

This is Tune CV input

ACC

This is the Accent input. +10V CV will set the Hi-Hats to the maximum volume, and it affects both Hi-Hats simultaneously

DEC CV

This is Decay CV input

OUT

This is the output of the module. Note that you can't play both HiHats simultaneously. The Open HiHat has priority over the Closed one



TUNE

Set the master Tune of Cymbals. This affects both Cymbals simultaneously, and essentially controls the sample playback rate

SELECT

Select one of 10 sets of Cymbal samples

CRASH LOOP, RIDE LOOP

These are cymbal "looping" switches. When they are on, after initial hit, a certain portion of the sample starts to loop during envelope generator decay until the VCA closes completely. This creates a feeling of delay applied to the cymbal. Note that looping works the best on long decay.

CRASH DECAY

Adjust Crash Cymbal decay time manually

RIDE DECAY

Adjust Ride Cymbal decay time manually

TUNE CV

This is Tune CV level attenuator

DECAY CV

This is Decay CV level attenuator. It effects both Cymbals simultaneously

Use the manual trigger buttons to check the Cymbal settings and add some beats during live performance

TUNE CV

This is Tune CV input

ACC

This is the Accent input. +10V CV will set the Cymbals to the maximum volume, and it affects both Cymbals simultaneously. The accent sensitivity is adjustable – please, refer to instructions in this manual

CR TRIG, RD TRIG

These are Trigger inputs. The LEDs indicate incoming triggers

CR D CV, RD D CV

These are Decay CV inputs

CR OUT

This is Crash Cymbal output

RD OUT

This is Ride Cymbal output and the Main output of the module – when nothing is patched in the Crash Cymbal output, it's automatically mixed to the Ride Cymbal output



RATE

Bicolour LEDs give visual feedback on the output status – the left LED indicates phase shifted output, the right one – the main output. Red is -5V, green is +5V

RATE1, RATE2

Set the initial LFO rate manually. When in SYNC mode this knob becomes a divider (/2, /4, /8 when turned CCW) or a multiplier (x2, x4, x8, when turned CW); at 12 o'clock setting the LFO rate will follow incoming clock signal

LINK2

The switch in upper position "links" LFO2 frequency to the LFO1. The RATE2 knob becomes frequency divider and multiplier. If LFO2 is in Sync mode and the LINK2 switch is engaged, the incoming sync signal is ignored

SHAPE1, SHAPE2

Select the waveform! Waveforms are morphed, so turning the knob, you'll get interesting in-between waveforms. A full CV setting is pitched noise. The pitch can be controlled via RATE1 and RATE 2 knobs correspondingly as well as RATE CV

VCA1

The switch in VCA1 position applies the built in VCA to the output of LFO1, meaning – it alters the output signal amplitude depending on RISE and FALL settings. The switch in PHASE setting allows you to adjust phase shift of the LFO signal on the OUT°1. Both effects can be used simultaneously, meaning, you can set the phase shift and then apply amplitude modulation to the LFO1

RISE, PHASE1

This knob has three functions: Adjust VCA envelope RISE time from 0 to 5"; Adjust phase shift on the OUT°1 from 0° to 360°; Adjust lowpass (CCW from 12:00) or highpass (CW form 12:00) filter cutoff frequency to the noise on the OUT°1. If you want to omit the VCA effect on the LFO1, set this knob all way CCW

FALL, PHASE2

This knob has three functions: Adjust VCA envelope FALL time from 0 to infinity; Adjust phase shift on the OUT°2 from 0° to 360°; Adjust lowpass (CCW from 12:00) or highpass (CW form 12:00) filter cutoff frequency on the OUT°2 If you want to omit the VCA effect on the LFO1, set this knob all way CW

SYNC1, SYNC2

These are SYNC inputs. When any clock signal is patched here, the LFO will automatically sync the frequency to the clock. Please, avoid shuffling clocks

OUT°1, OUT°2

These are phase shifted outputs

RATE CV1, RATE CV2

These are LFO/noise rate CV inputs. They are automatically disactivated when the sync signal is applied

OUT1, OUT2

These are main outputs



IN1-IN4

IN1 – IN4 potentiometers adjust signal level on relevant inputs.

LEDs give visual feedback on signal level after input potentiometers. LEDs lit when signal reaches 5Vptp

PAN 1

Input 1 has a panning option – when mono signal is patched in IN1 L, use PAN1 knob to adjust IN 1 place in the stereo image. Same works with a stereo signal applied on IN1.

IN2

IN2 is configurable via switch. S is regular stereo setting, +6 setting boosts the incoming signal by +6dB. M setting routes IN2 L and IN2 R signals to both stereo channels, meaning you get two mono inputs with a single volume control

IN

These are the Audio inputs. If only Left input is used, signal is automatically normalled to the Right channel

OUT L& OUT R

These are Left and Right outputs of the mixer



IN1-IN7

IN1 – IN7 potentiometers adjust signal level on relevant inputs.

LEDs give visual feedback on signal level after input potentiometers. LEDs lit when signal reaches 5Vptp

A+M

Use switches to assign the first three inputs to Main or to both Main and Aux Send outputs

IN

These are the Audio inputs. The input signal can be boosted for +6dB with the level potentiometer knobs full CW

COMP AMT

Adjust compression amount to your taste! Note that maximum compression amount settings may result in more noisy output

RELEASE

Adjust compressor release time to your taste!

AUX OUT

This is the effects send output

MAIN OUT

This is the main output of the mixer



PARAM 1

Adjust the first parameter of the effect

SAVE

Push and hold the SAVE button for 2" to save the parameter and dry/wet settings with the effect. To recall parameter and dry/wet settings, push the SAVE button promptly. All three effect select LEDs will blink once to confirm setting recall. Now, if you turn the parameter knobs to alter the settings, the LEDs will flash once, when the saved position of the potentiometer is reached. Only then parameter changes will take effect.

PARAM 2

Adjust the second parameter of the effect

LEDs

These are the effect indicator LEDs. They indicate one of 8 selected effects in binary code. Please, refer to the Effect table below!

DRY/WET

This is dry/wet control potentiometer

SELECT

This is effect select button. Push it promptly to navigate thru effects. To assign CV input to control one of the parameters or dry/wet setting, push and hold the button for 2". The first effect indicator LED will start to flash, indicating that the CV is assigned to the first parameter. Push the button repeatedly to assign the CV input to the 2nd effect or to dry/wet control.Push the SAVE button to confirm

CV IN

This is the assignable CV input

IN 1

This is the audio input. The effects are designed to add stereo spread to the mono input signal

OUT L, OUT R

These are left and right outputs. We highly recommend to use the module with the stereo mixer

FX	DRY/WET	PARAM 1	PARAM 2
MONO DELAY	DRY/WET	TIME	FEEDBACK
STEREO DELAY	DRY/WET	TIME	FEEDBACK
HI PASS DELAY	DRY/WET	TIME	HI PASS FILTER
BIG REVERB	DRY/WET	SIZE	TONE
SATURATED REVERB	DRY/WET	SIZE	TONE
STALKER REVERB	DRY/WET	TONE	FEEDBACK
RIPPER	DRIVE	CRUSH	DELAY TIME
DUAL PITCH SHIFTER	DRY/WET	SHIFT 1	SHIFT 2



GAIN1, GAIN2

Adjust Gain for the each section manually

MODE1, MODE2

Mode switch allows you to select one of three overdrive flavours – it connects drive circuits in several combinations

DRIVE1, DRIVE2

Adjust overdrive level for each section manually

CV LVL 1, CV LVL 2

These are CV level attenuators. Note that they affect both CV (Gain and Drive) inputs simultaneously

GAIN CV IN, DRIVE CV IN

These are Gain and Drive CV inputs

IN 1, IN 2

IN1 and IN2 are audio inputs of both overdrive sections. Please note, that if nothing is patched in IN2, it is normalled to OUT1 and both sections automatically are connected in series

LEDs give visual feedback on overdrive level

OUT 1, OUT 2

These are outputs of both overdrive sections



IN1-IN6

IN1 – IN6 potentiometers adjust signal level on relevant inputs.

LEDs give visual feedback on signal level after input potentiometers. LEDs lit when signal reaches 5Vptp

A+M

Use switches to assign the first three inputs to Main or to both Main and Aux Send outputs

IN

These are the Audio inputs. The input signal can be boosted for +6dB with the level potentiometer knobs full CW

TRIMMER POTENTIOMETERS

Use a small screwdriver to access the top trimmer potentiometer and set the compression amount to your taste! Note that maximum compression amount settings may result in more noisy output. The bottom trimmer potentiometer adjusts compressor release.

A OUT

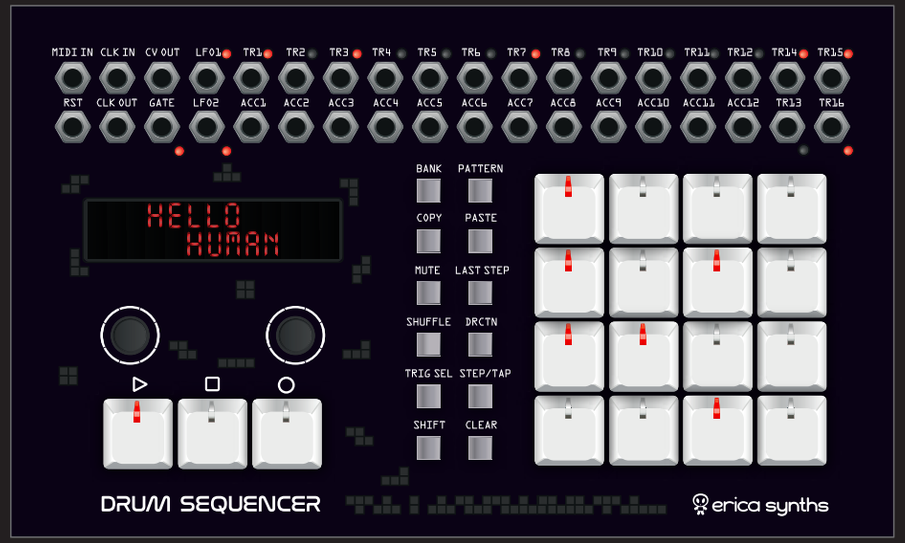
This is the effects send output

M OUT

This is the main output of the mixer



DRUM SEQUENCER



THANK YOU FOR PURCHASING ERICA SYNTHS DRUM SEQUNCER!

We believe, this is the end of the history performance sequencer for modular drums and basslines. It's easy to use, classical, X0X style live performance oriented module that provides the ultimate control over your modular system.

Enjoy, and let us know, what you think!

This is manual for the Drum Sequencer Firmware 1.030.
For the latest firmware and manual please check:
www.ericasynths.lv

erica synths

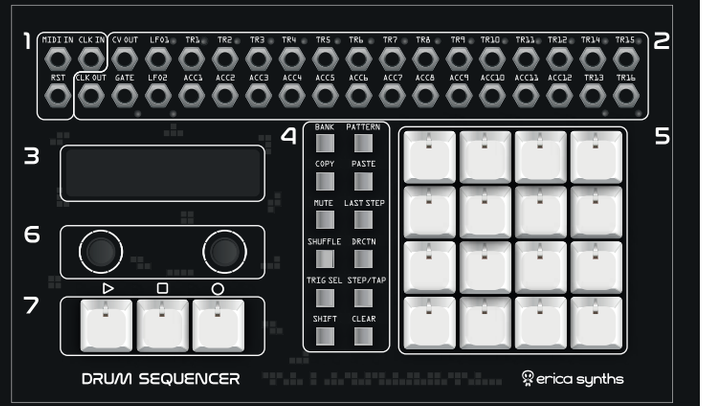
FEATURES

16x trigger outputs
12x Accent outputs
1x CV track
1x Gate track
2xLFO with independent or synced to the BPM frequency
Time signature per Track
Pattern length per Track
Shuffle per track
Probability per step
Retrigger per step
Instant pattern switching
Solo/Mute tracks
Step/Tap record modes
16 Banks of 16 Patterns
Quick Copy/Paste per tracks & patterns
Instant pattern switching
Pattern linking
Midi sync in
Firmware upgrade via midi input

SPECIFICATIONS

Trigger amplitude	5V
Panel width	42HP
Module depth	220mm
Power consumption	152mA@+12V, 56mA@-12V

DRUM SEQUENCER QUICK START



1	INPUTS (MIDI IN, Clock IN, Reset)
2	OUTPUTS (16x triggers, 12x accents, 2xLFOs, 1x CV & 1x Gate)
3	OLED Display
4	FUNCTION KEYS
5	STEP KEYS
6	DATA ENTRY ENCODERS
7	PLAY / STOP / RECORD (SAVE)

BASIC PATTERN PROGRAMMING:

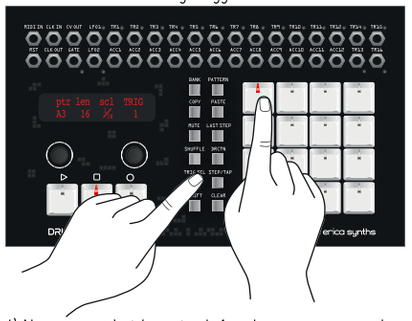
1) Set the desired tempo by entering the Pattern Play mode by pressing the PATTERN key.
Pattern Play mode screen:



2) Now when you are in the Pattern Play mode set the desired BPM with ENCODER 2
3) Now exit the Pattern Play mode by pressing the PATTERN key again
Pattern Edit mode screen:

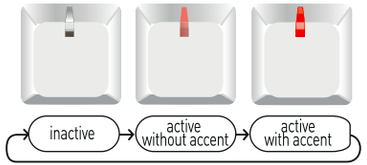


4) Now press the PLAY button and Drum Sequencer will start to run!
5) Select the trigger track 1 by holding down TRIG SEL and pressing step button 1, or navigate to TRIG setting with ENCODER 1 and scroll trough trigger tracks with ENCODER 2.



6) Now you are in trigger track 1 and you can program in a sequence with step keys.
6A) By default the accents are disabled on trigger tracks, if you want to enable accents on a track press TRIG SEL while holding down SHIFT)
On the OLED Display: 1 (track number) = no accents, 1+ = track with accents enabled

When the accents are enabled the step keys have three positions:



NB! Accents take your analogue drum modules sound to the next level, so try not to overlook them.
7) To select and program different trigger track press and hold TRIG SEL and corresponding step (Trigger track) button!
7A) To clear a track press and hold the CLEAR button while the pattern is playing.
If you want to clear the whole track instantly hold down SHIFT and promptly press CLEAR.
7B) To change scale of the track turn the ENCODER 1 and select the SCL parameter and choose between ¼, 1/8, 1/8t, 1/16, 1/16t, 1/32 settings with ENCODER 2.
Scale setting selected:



8) To copy trigger track press COPY and track will be copied to the buffer, to paste it go to the trigger track where you want to paste it and press PASTE.
9) Now when you have made a pattern you can save it by pressing the RECORD key
10) If you want to make a variation of the pattern you just made go to Pattern Play screen by pressing PATTERN key.
11) To copy pattern press the COPY key and pattern will be copied to the buffer.
12) Now select desired pattern slot where you want to paste your pattern with the step keys and press PASTE button! The pattern will be copied from the buffer to selected slot.
13) Now press RECORD key to save the pasted pattern in the selected slot!
14) To edit copied pattern press the PATTERN key and you will get back to Pattern Edit screen.

PROGRAMMING A PATTERN LONGER THAN 16 STEPS:

Maximum Pattern length of the Drum sequencer is 64 steps and there is different ways to set it.
1) To set all tracks to be 64 step (or any other step amount) long go to the Pattern Play screen and press and hold the LAST STEP function key.
Last step setting screen in **Pattern Play mode screen:**



2) Now while holding down the LAST STEP function key you can dial in 64 with the ENCODER 2, or dial in Bar 4 with the ENCODER 1 and set the last step with STEP KEY 16. Both of these methods will set all tracks to be 64 steps long.
3) Now get back to Pattern Edit mode by pressing PATTERN function key.
Pattern Edit screen with 64 steps:



4) Now you can press PLAY and the sequencer will start to run with all tracks set to 64 steps, but you will see only the first 16 steps.
There is two ways show you can navigate trough all 64 steps:
1. Scrolling trough BARs manually with ENCODER 2. (each bar is 16 steps so there is 4 bars totally). First number under BAR shows which BAR is playing now and second number shows which BAR you are editing.
2. Enabling BAR auto follow by pressing the ENCODER 2 while the BAR setting is selected with ENCODER1.
Pattern Edit screen with 64 steps and BAR follow enabled:



5) So now you have a set up a pattern which is 64 steps long. You can still set the individual tracks to be shorter by simply going to track and pressing LAST STEP and desired STEP KEY (depending on in which BAR are you now) or by selecting LEN parameter with ENCODER 1 and setting the desired step amount with ENCODER 2.

PROGRAMMING ADVANCED PATTERNS - SHUFFLE, DIRECTION, LAST STEP AND STEP EVENTS:

1) To add some groove, for example to a hi hat track press and hold the SHUFFLE button and dial in desired shuffle amount for the track with ENCODER 2.
Shuffle screen:



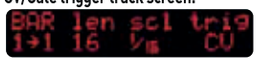
NB! Shuffle also works globally so you can set shuffle for all tracks at the same time.
To do that go to Pattern Play mode and press and hold down the SHUFFLE function key and dial in the desired shuffle amount with ENCODER 2 (This is how shuffle works on the 909 for example).
2) If you want to make the track run in different direction from other tracks press and hold DRCTN and dial in the direction with ENCODER 2. Available directions are: FORWARD, BACKWARD, PING-PONG and RANDOM
NB! Same as for the shuffle the Direction setting can be also set globally.
Just go to the Pattern Play screen and press and hold down the DRCTN function key and dial in the direction with ENCODER 2. This works great especially when you jump from FORWARD then to RANDOM and then back to FORWARD.
3) To set individual track length for a track press and hold the LAST STEP function key and with STEP key set in the desired length. This way you can create interesting polyrhythmic sequences!
4) To get into STEP EVENTS press and hold SHIFT and select step you want to edit.
Step events screen:



Now you can navigate trough options with ENCODER 1 and set value with ENCODER 2
You can jump to steps you want to edit with STEP KEYS as pressing a step key in Step Event screen wont remove the trigger from the trigger track, but just jump to the STEP EVENTS page of selected step.
BAR = shows the BAR location. Works same way as in the pattern edit.
uTM = Micro timing – this allows to move the selected step left or right from the grid and lets you create your own shuffle!
PRO = Probability/Ratio – with this setting you can set the probability or ratio of trigger being triggered. (for example if its set to 1:4 ratio the trigger will occur every 4 plays, but if set to 25% there is 25% chance that trigger will be executed)
5) To exit STEP EVENTS press the PATTERN key

PROGRAMMING CV/GATE TRACK:

CV/Gate track have two screens, so before you program in CV and GATE values you have to enable steps on the track. Just like you would enable triggers on a trigger track.
1) Enter CV/Gate trigger track – press and hold TRIG SEL and then promptly press ENCODER 2.
CV/Gate trigger track screen:



In this screen you can enter the triggers into the CV/Gate track – these will be the active steps for the CV/Gate track!
NB! The CV trigger acts the same way as other trigger tracks so STEP EVENTS, SHUFFLE, LAST STEP and DIRECTIONS are also available by pressing SHIFT and desired STEP KEY.
2) Now to enter note values and gate times for the active steps you just entered you need to enter Note Edit screen by pressing the ENCODER 1!
Note Edit screen:



3) Now when you are in the note edit screen you can navigate trough parameters with ENCODER 1 and dial in values with ENCODER 2.
Also you can jump to steps you want to edit with STEP KEYS as pressing a step key in Note Edit screen wont remove the trigger from the CV/Gate track same as for the Step Events edit screen.
4) Dial ENCODER 1 to NTE setting and jump trough steps with STEP KEYS and dial in different note values in the sequence with ENODER 2.

EVENTS page of selected step.
BAR = shows the BAR location. Works same way as in the pattern edit.
uTM = Micro timing – this allows to move the selected step left or right from the grid and lets you create your own shuffle!
PRO = Probability/Ratio – with this setting you can set the probability or ratio of trigger being triggered. (for example if its set to 1:4 ratio the trigger will occur every 4 plays, but if set to 25% there is 25% chance that trigger will be executed)
5) To exit STEP EVENTS press the PATTERN key

PROGRAMMING CV/GATE TRACK:

CV/Gate track have two screens, so before you program in CV and GATE values you have to enable steps on the track. Just like you would enable triggers on a trigger track.
1) Enter CV/Gate trigger track – press and hold TRIG SEL and then promptly press ENCODER 2.
CV/Gate trigger track screen:



In this screen you can enter the triggers into the CV/Gate track – these will be the active steps for the CV/Gate track!
NB! The CV trigger acts the same way as other trigger tracks so STEP EVENTS, SHUFFLE, LAST STEP and DIRECTIONS are also available by pressing SHIFT and desired STEP KEY.
2) Now to enter note values and gate times for the active steps you just entered you need to enter Note Edit screen by pressing the ENCODER 1!
Note Edit screen:



3) Now when you are in the note edit screen you can navigate trough parameters with ENCODER 1 and dial in values with ENCODER 2.
Also you can jump to steps you want to edit with STEP KEYS as pressing a step key in Note Edit screen wont remove the trigger from the CV/Gate track same as for the Step Events edit screen
4) Dial ENCODER 1 to NTE setting and jump trough steps with STEP KEYS and dial in different note values in the sequence with ENODER 2.

2) Navigate trough options with ENCODER 1 and set the value with ENCODER 2
(To speed up value entering press and hold SHIFT and then turn ENCODER2)
LFO – Switch between LFO out 1 and 2
WAV – Select the LFO waveform (SIN, TRI, SAW, SQR, S&H)
FRQ – Set the LFO frequency, or enable LFO sync by pressing ENCODER 2 while you are on the FREQ parameter and then set the desired sync rate.
AMP – Set the LFO amplitude
NB! LFO settings are saved within a pattern.

TAP MODE:

Instead of just step sequencing you can also program beats by tapping them in using the STEP KEYS. To do that:
1) Get in the Pattern edit mode and press STEP/TAP key.
(When the STEP/TAP key blinks you are in TAP mode.)
2) Now when hitting STEP KEYS you will launch the corresponding triggers.
3) To record your playing press the RECORD key – it will stay lit, that means Drum Sequencer is now recording - STEP KEY playing will be recorded to the sequence.
4) To exit RECORD mode press RECORD KEY.
5) To clear a track press and hold CLEAR key and the corresponding track STEP KEY.
(Erasing happens while both keys are boing held down)
6) To get back to STEP mode press the STEP/TAP key.
7) You can also do fills in the TAP mode, to do that press and hold SHIFT button and promptly pres the BANK key.

FILL MODE:

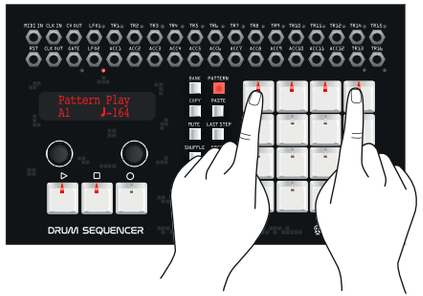
Fill mode lets you record notes and create fills by holding STEP keys.
It is also known as Note Repeat function in other sequencers.
1) As first get in the TAP mode by pressing the STEP/TAP key.
2) Now press and hold down SHIFT button and press the BANK button promptly.
Fill mode screen:



3) Set the desired FILL rate with ENCODER 1.
4) Press the STEP KEY of corresponding trigger track you want to fill to launch the triggers!
5) To record press the RECORD key
6) To exit press STEP/TAP or PATTERN key

PATTERN LINKING:

You can make longer sequences by linking together multiple patterns. For example to link first four patterns:
1) Get into the Pattern Play mode by pressing PATTERN key.



2) Press and hold down the STEP KEY 1 and while holding it down press the STEP KEY 4. Now all STEP keys of the first row will light up – that means that the patterns are linked.
3) To unlink patterns and continue to play one pattern press any of the STEP KEYS.

SETTINGS:

1) To enter SETTINGS screen press and hold SHIFT and then press PLAY button
(You can only enter settings when Drum Sequencer is not playing!).
SETTINGS screen :



2) Navigate trough options with ENCODER 1 and set the value with ENCODER 2.
SYN – Synchronisation:
MST = Master clock
MID = MIDI Slave mode (This mode also responds to Start/Stop messages from external MIDI clock source)
CLK = Analog clock slave (This mode waits for 4PPQ clock signal which equals to 16 ticks per one beat)
BPM – Set the default sequencer BPM
PUL - Sets the pulse width of the Trigger outputs. (Take note that analog drum modules work better with shorter trigger signals, but digital ones usually want longer triggers so you have to find the sweet spot with this setting and your setup)
CLK - Sets the clock output rate

INITIALISE EEPROM:

Hold START & STOP keys when powering up the Drum Sequencer and EEPROM initialisation will happen. This will clear the whole memory of the Trigger Sequencer and should be done if you are experiencing problems with your Drum Sequencer.
This is also highly recommend after firmware updates.

FIRMWARE UPDATE:

You need a SysEx transmitter software (MidiOx on Windows or SysEx Librarian on macOS), MIDI interface and a MIDI 5DIN to stereo minijack cable converter which was included in the module package.
1) Download the latest Drum Sequencer firmware *.hex file from www.ericasynths.com
2) Connect Drum Sequencer MIDI IN to your MIDI interface OUT with the included adapter.
3) In you SysEx software preferences set the buffer size to 64 bytes. This is very important as otherwise update will fail!).
4) Turn on Drum Sequencer while holding 1 & 4 step key buttons while powering one the sequencer and "Waiting for SysEx..." message should appear.
5) Now start playback of the Drum Sequencer MIDI SysEx file on the software you are using.
6) Have a drink and patiently wait. This will take a while...
7) After successful update Drum Sequencer should start automatically, if it doesn't start try to restart the unit.

KEYS IN PATTERN EDIT MODE:

PATTERN – Switch between Pattern Edit & Pattern Play modes.
BANK – ****
COPY – Copy selected trigger track to buffer
PASTE – Paste selected track from buffer
MUTE – Mute brings you to MUTE screen where with step keys you can mute tracks
LAST STEP – While holding down set the last step of the track with step key.
SHUFFLE – While holding down set the shuffle for selected track with Encoder 2
DRCTN – While holding down set the direction of track with Encoder 2
TRIG SEL – Select the Trigger track you want to edit
STEP/TAP – Switch between STEP RECORD and TAP RECORD modes
SHIFT – While pressed down brings alternate functions for function keys
CLEAR – Clear the recoded notes while holding down
PLAY – Starts to play the sequence
STOP – Stops the sequence and when the STOP is pressed again continues to play the sequence from the place it was stopped
RECORD – Saves the sequence
ENCODER 1 – Navigate trough screen settings
ENCODER 2 – Change the selected option value
ENCODER 2 PRESS - Works as reset to default value in LFO & CV edit screens

SHIFT KEY SHORTCUTS IN PATTERN EDIT MODE:

SHIFT + CLEAR – Clears the whole track triggers instantly
SHIFT + TRIG SEL – Enable or disable accents for a track (+1 = acc on / 1 = acc off)

KEYS IN PATTERN PLAY MODE:

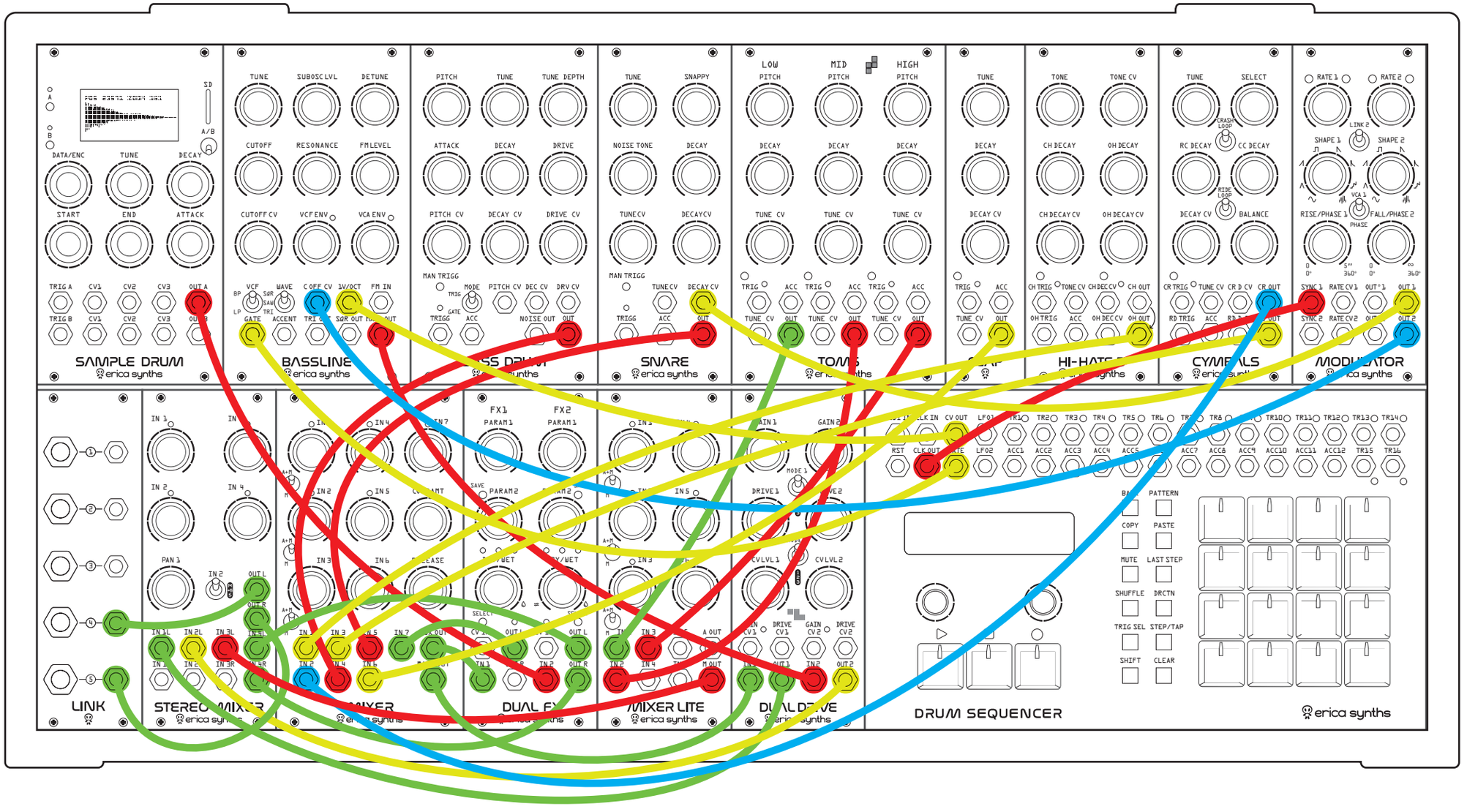
PATTERN - switch between Pattern Edit & Pattern Select modes.
BANK – While pressed down press step button to select a BANK. (8 BANKS = A-H)
COPY – Copy pattern to buffer
PASTE – Paste track from buffer
MUTE – Mute brings you to MUTE screen where with step keys you can mute tracks
LAST STEP – While holding down set the last step of the pattern with step key
SHUFFLE – While holding down set the shuffle amount for all tracks with Encoder 2
DRCTN – While holding down set the direction for all tracks with Encoder 2
TRIG SEL – Select the trigger track with step buttons and edit it
STEP/TAP – *****
CLEAR – Clears the Selected pattern
PLAY – Starts to play the sequence from beginning
STOP – Stops the sequence and when the STOP is pressed again continues to play the sequence from the place it was stopped
RECORD – Saves the pattern

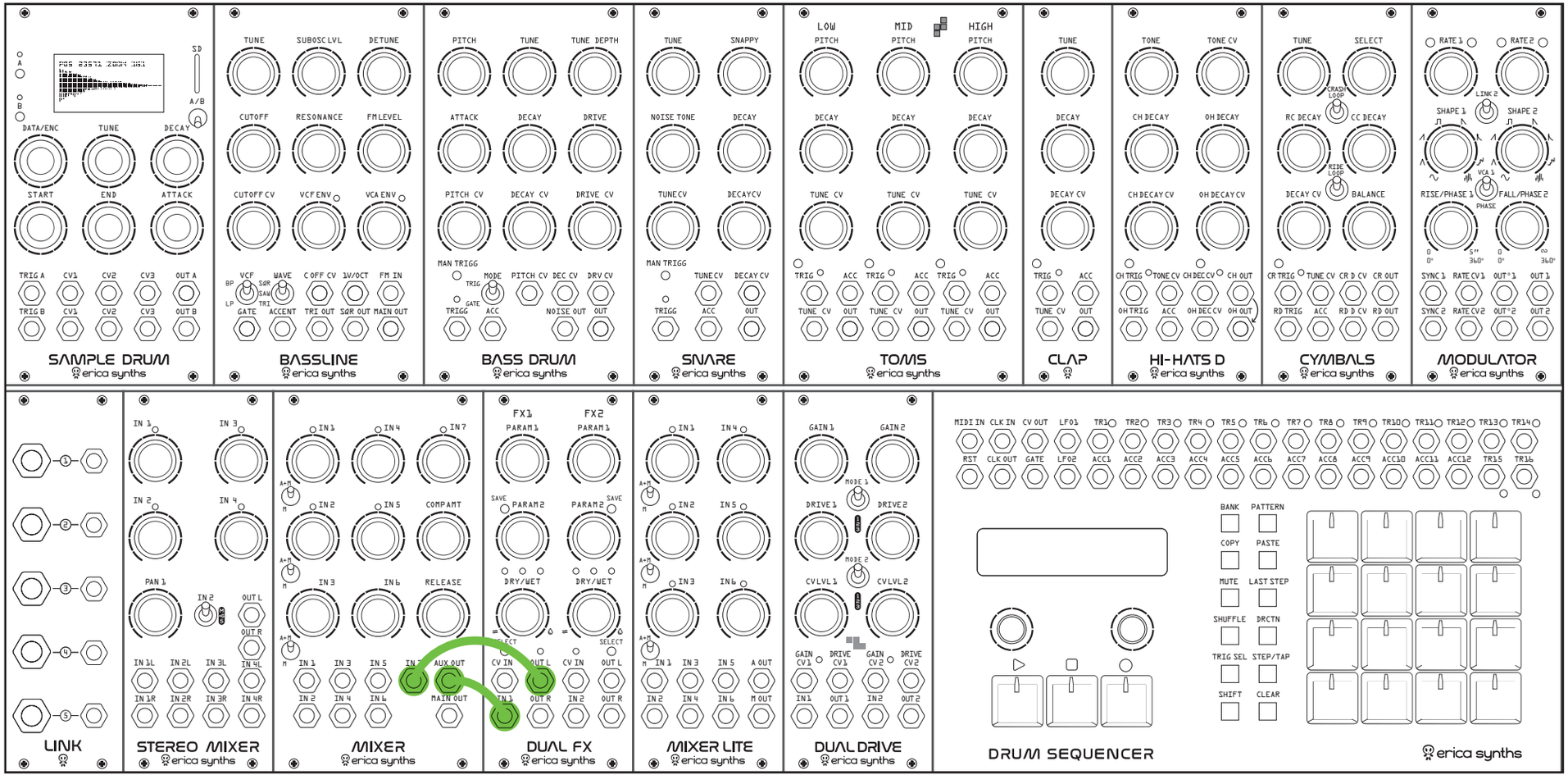
SHIFT KEY SHORTCUTS IN PATTERN EDIT MODE:

SHIFT + STEP KEY – Switches to selected pattern instantly

Patch #1 - The System

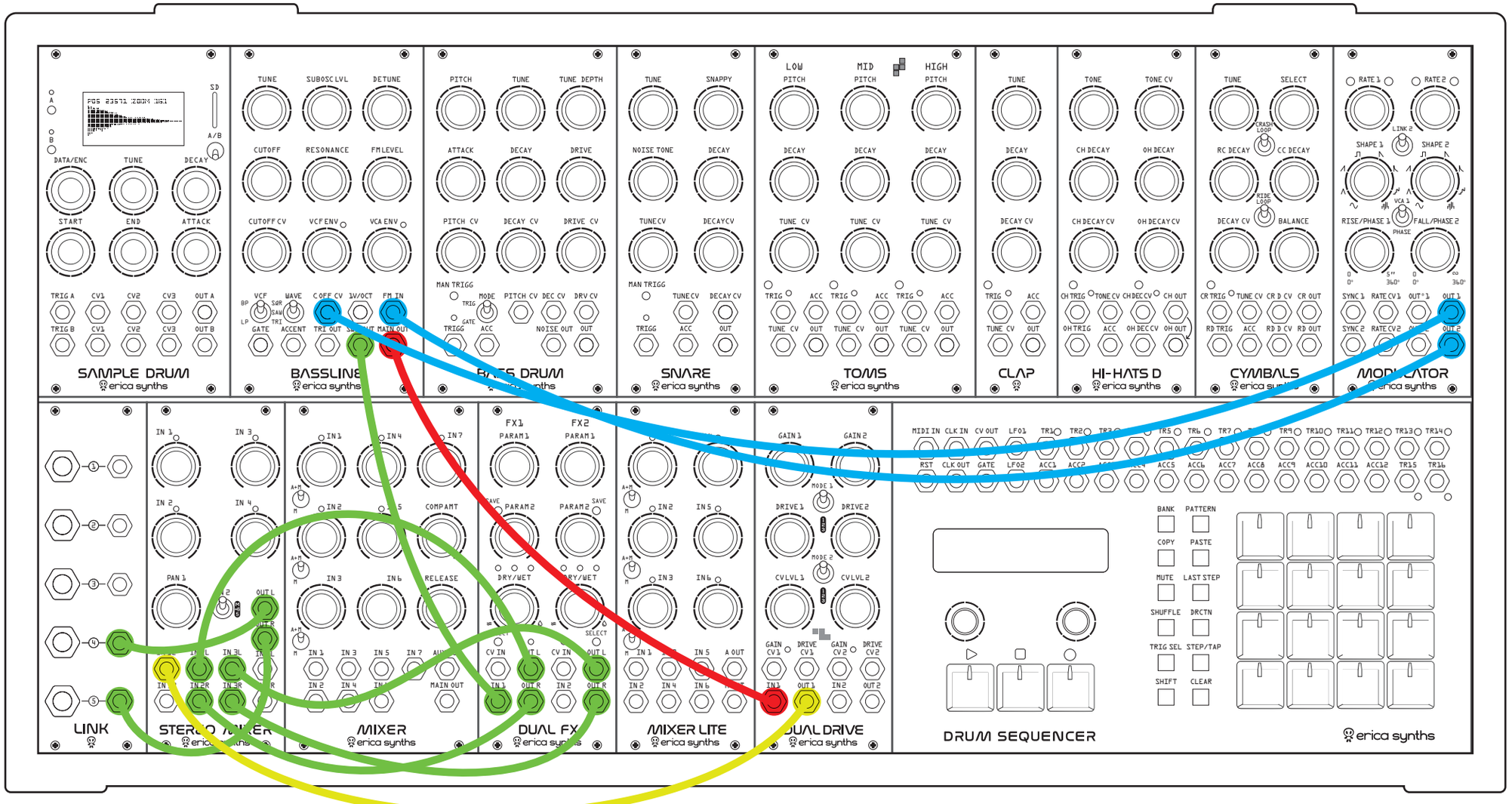
The patch which utilises all modules in Techno System





Patch #2 - FX AUX

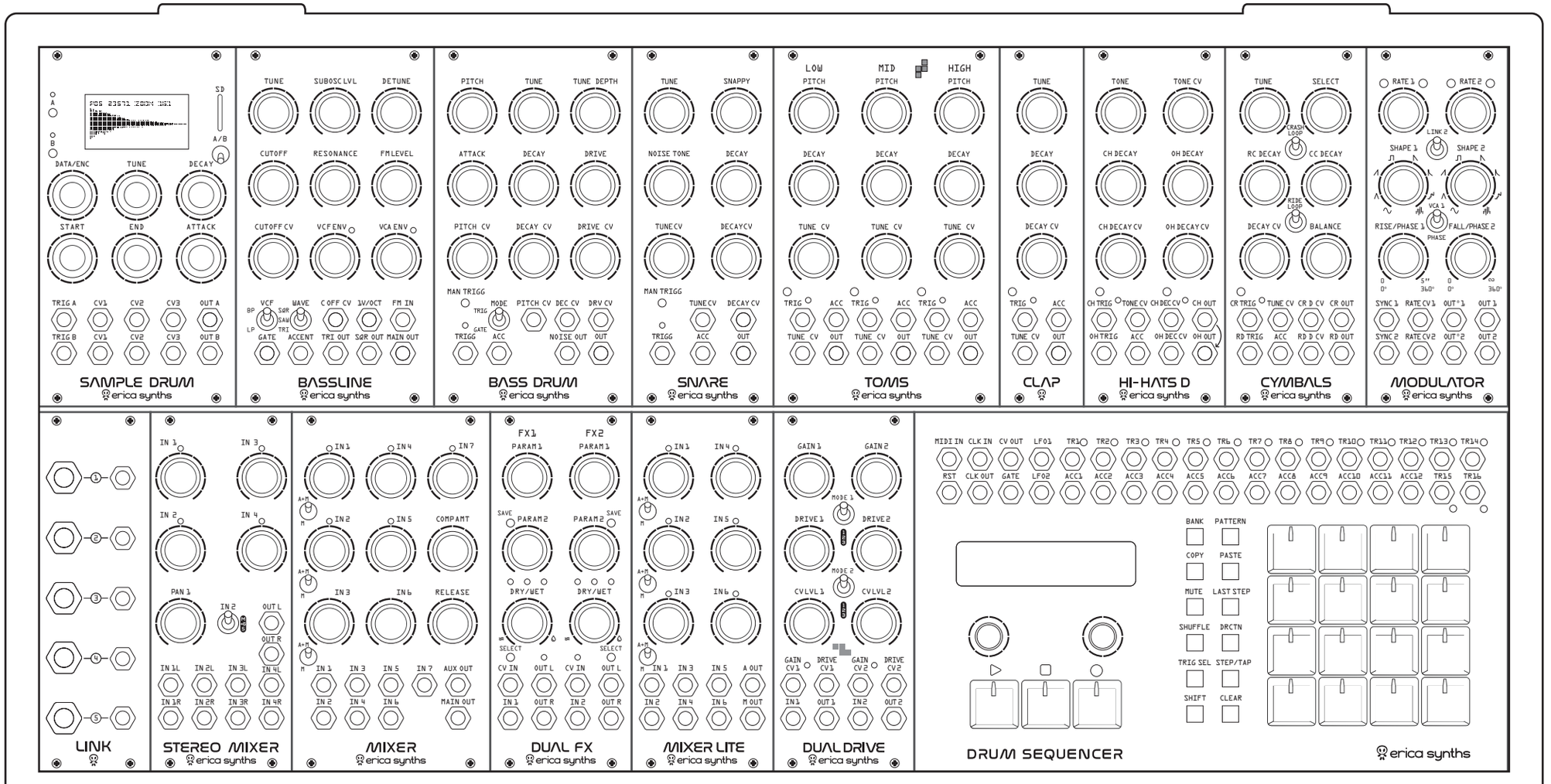
With this simple patch you can use one of Dual FX channels as aux FX with the mixer.
Set the dry/wet to fully wet position and channel 7 on mixer will now work as FX return.
To send first three channels to FX engage the AUX send with the small rocker switches.



Patch #3 - DRONE

This patch lets you create epic drones with the Bassline. Play around with the "Dual Pitch Shifter" patch on the Dual FX and create massive wall of sound.

Also set the Modulator to work as noise source and play around with FM & Cutoff CV attenuators on the Bassline.


SAMPLE DRUM
erica synths
DATA/ENC
TUNE
DECAY
START
END
ATTACK
TRIG A
CV1
CV2
CV3
OUT A
TRIG B
CV1
CV2
CV3
OUT B
BASSLINE
erica synths
TUNE
SUBOSC LVL
DETUNE
CUTOFF
RESONANCE
FM LEVEL
CUTOFF CV
VCF ENV
VCA ENV
VCF
WAVE
C OFF CV
1V/OCT
FM IN
GATE
ACCENT
TRI OUT
SQR OUT
MAIN OUT
BASS DRUM
erica synths
PITCH
TUNE
TUNE DEPTH
ATTACK
DECAY
DRIVE
PITCH CV
DECAY CV
DRIVE CV
MAN TRIGG
MODE
PITCH CV
DEC CV
DRV CV
TRIGG
ACC
NOISE OUT
OUT
SNARE
erica synths
TUNE
SNAPPY
NOISE TONE
DECAY
TUNE CV
DECAY CV
MAN TRIGG
TUNE CV
DECAY CV
TRIGG
ACC
OUT
TOMS
erica synths
LOW
MID
HIGH
PITCH
DECAY
TUNE CV
TRIG
ACC
OUT
CLAP
erica synths
TUNE
DECAY
DECAY CV
TRIG
ACC
TUNE CV
OUT
HI-HATS D
erica synths
TONE
TONE CV
CH DECAY
OH DECAY
CH DECAY CV
OH DECAY CV
CH TRIG
TONE CV
CH DEC CV
CH OUT
OH TRIG
ACC
OH DEC CV
OH OUT
CYMBALS
erica synths
TUNE
SELECT
CRASH LOOP
RC DECAY
CC DECAY
RIDE LOOP
DECAY CV
BALANCE
CR TRIG
TUNE CV
CR D CV
CR OUT
RD TRIG
ACC
RD D CV
RD OUT
MODULATOR
erica synths
RATE 1
RATE 2
LINK
SHAPE 1
SHAPE 2
VCA 1
RISE/PHASE 1
FALL/PHASE 2
PHASE
SYNC 1
RATE CV1
OUT 1
SYNC 2
RATE CV2
OUT 2
LINK
STEREO MIXER
erica synths
IN 1
IN 2
IN 3
IN 4
PAN 1
OUT L
OUT R
IN 1L
IN 1R
IN 2L
IN 2R
IN 3L
IN 3R
IN 4L
IN 4R
MIXER
erica synths
IN 1
IN 2
IN 3
IN 4
IN 5
IN 6
IN 7
COMP AMT
RELEASE
AUX OUT
MAIN OUT
DUAL FX
erica synths
FX1
FX2
PARAM 1
PARAM 2
SAVE
DRY/WET
SELECT
CV IN
OUT L
OUT R
MIXER LITE
erica synths
IN 1
IN 2
IN 3
IN 4
IN 5
IN 6
A OUT
M OUT
DUAL DRIVE
erica synths
GAIN 1
GAIN 2
MODE 1
MODE 2
DRIVE 1
DRIVE 2
CV LVL 1
CV LVL 2
GAIN CV1
DRIVE CV1
GAIN CV2
DRIVE CV2
IN1
OUT1
IN2
OUT2
DRUM SEQUENCER
erica synths
MIDI IN
CLK IN
CV OUT
LFO1
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
TR11
TR12
TR13
TR14
RST
CLK OUT
GATE
LFO2
ACC1
ACC2
ACC3
ACC4
ACC5
ACC6
ACC7
ACC8
ACC9
ACC10
ACC11
ACC12
TR15
TR16
BANK
PATTERN
COPY
PASTE
MUTE
LAST STEP
SHUFFLE
DRCTN
TRIG SEL
STEP/TAP
SHIFT
CLEAR

SAFETY INSTRUCTIONS

Please follow the instructions for use of the Erica Synths Techno System below, ‘cause only this will guarantee proper operation of the module and ensure warranty from Erica Synths.

Use Erica Synths Techno System exclusively with the power supply unit (PSU) supplied with the system. Powering it with other PSU units may cause permanent damage of the device.

Water is lethal for most of the electric devices, unless they are made waterproof. Erica Synths Techno System is NOT intended for use in a humid or wet environment. No liquids or other conducting substances must get into the module. Should this happen, the module should be disconnected from mains power immediately, dried, examined and cleaned by a qualified technician.

Do not expose the module to temperatures above +50° C or below -20° C. If you have transported the system in extreme low temperatures, leave it in room temperature for an hour before plugging it in.

Transport the instrument carefully, never let it drop or fall over. Warranty does not apply to modules with visual damages.

The system has to be shipped in the original packaging only. Any system shipped to us for return, exchange and/or warranty repair has to be in its original packaging. All other deliveries will be rejected and returned to you. Make sure you keep the original packaging and technical documentation.
You will find Erica Synths terms of warranty at www.ericasynths.lv.
Items for return, exchange and/or warranty repair have to be sent to:
Erica Synths, Andrejostas Str. 143, Riga, Latvia, LV-1045

DISPOSAL

This device complies to the EU guidelines and is manufactured RoHS conforming without use of led, mercury, cadmium and chrome. Nevertheless, this device is special waste and disposal in household waste is not recommended.

User manual by Girts Ozolins@Erica Synths .
Design by Edmunds Pavlovskis.
Copying, distribution or any commercial use in any way is prohibited and needs the written permission by Erica Synths.
Specifications are subject to change without notice.
In case of any questions, feel free to contact us through
www.ericasynths.lv or via e-mail
info@ericasynths.lv.