PLUGFREAK



Analog Percussion Synthesizer

User Manual - Version 1.0.0

START HERE

Contents

TALUS is an analog percussion synthesizer with two oscillators, an 8-step pitch/velocity sequencer, dual sample-and-hold generators, an 8-slot modulation patch bay and a flam control. Use this guide to install it and learn each part of the interface.

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> **SYSTEM**
>
> TALUS 1.0.0 runs on Windows 10/11 as a 64-bit VST3 plugin. Its VST3 bundle is a folder named TALUS.vst3.

01 | SETUP

Quick start

Install TALUS

1 Close your DAW. Unzip the TALUS download.

2 Copy the TALUS.vst3 folder to C:\Program Files\Common Files\VST3\. Do not rename the .vst3 bundle.

3 Open your DAW and rescan plugins if TALUS does not appear automatically. Find TALUS in the instrument list under PLUGFREAK.

4 Load TALUS on an instrument track. Use PLAY for manual transport, or DAW SYNC to follow the host transport and tempo.

Try it and activate it

CONTROL	FUNCTION
TRIAL	The full-function 10-day trial starts automatically when you first open TALUS. An internet connection is needed for this first start; there is no trial button or account step.
LICENSE	For a purchased license, open LICENSE at the upper right. Copy your Machine Code and send it if requested, or enter your License Key, then choose ACTIVATE.
PRESETS	The included presets are installed separately from licensing. See page 11 for the Documents folder and the 47 included preset files.

FIRST SOUND

Select a preset or shape a sound with the ANALOG PERCUSSION VOICE controls. The sequencer can be started with PLAY when DAW SYNC is off, or can follow the host when sync is enabled.

02 | MAP

Interface overview

The numbers identify the main areas in the current TALUS interface. The image is the actual interface; only the numbered markers have been added.



1 GLOBAL / CLOCK / SCALE - tempo, transport, pitch routing, master level and RESET ALL (page 5).

2 ANALOG PERCUSSION VOICE - oscillators, noise, filter, VCA/LPG and drive (pages 6-7).

3 8-STEP PITCH / VELOCITY SEQUENCER - pitch, velocity and step variation (page 8).

4 DUAL S&H / RANDOM CV - two independent random-control generators (page 9).

5 PATCH BAY / MOD MATRIX - eight modulation slots (page 10).

6 FLAM - double-hit control and spacing (page 11).

7 Preset selector and SAVE / SAVE AS / DELETE (page 11).

8 LICENSE access (page 12).

9 ABOUT - product information (page 12).

03 | CONTROL REFERENCE

Global / clock / scale

This strip sets transport, tempo, scale quantization, pitch routing and the final output level. RESET ALL is also located here.

CONTROL	FUNCTION
DAW SYNC	When enabled, TALUS follows the host transport and tempo. The HOST readout shows sync status.
PLAY	Starts or stops TALUS manually when you want to run it independently of the host transport.
TEMPO	Sets manual sequencer tempo when DAW SYNC is not controlling the clock.
ROOT	Selects the musical root from C through B.
SCALE	Quantizes pitch to OFF, CHROMATIC, MAJOR, MINOR, DORIAN, PHRYGIAN, LYDIAN or MIXOLYDIAN.
PITCH ROUTE	Routes the pitch sequence to VCO1&2, OFF or VCO2 only.
VOLUME	Sets TALUS's final master output level.
RESET ALL	Returns the visible instrument to a clean INIT state, including sequencer, modulation, FLAM, sync and transport.

Pitch quantization order

Musical step pitch is quantized after step modulation: step pitch, then step modulation, then ROOT/SCALE quantization, then the oscillator. Patch Bay modulation can therefore move a pitch step before it is snapped to the chosen scale. Fine pitch effects such as FM and continuous pitch motion remain free where appropriate.

> **TIP**
>
> Set ROOT and SCALE, choose VCO1&2 in PITCH ROUTE and give the eight steps different pitches. Add PROBABILITY or S&H modulation after the pattern is working.

04 | VCO 1 AND VCO 2

Analog percussion voice

The voice combines two analog-style oscillators. Each has its own level, tuning and pitch envelope.

VCO 1 / PITCH EG

CONTROL	FUNCTION
WAVE	Selects TRIANGLE, SQUARE or SAW for VCO 1.
-OCT / +OCT	Shifts VCO 1 by one octave per click.
TUNE	Sets VCO 1 pitch offset across a wide semitone range.
VCO 1 LEVEL	Sets the main level of oscillator 1.
EG DECAY	Sets the decay time of VCO 1's pitch envelope.
VCO 1 EG AMOUNT	Sets the depth and direction of VCO 1 pitch-envelope movement.

VCO 2 / FM / SYNC

CONTROL	FUNCTION
WAVE	Selects TRIANGLE, SQUARE or SAW for VCO 2.
-OCT / +OCT	Shifts VCO 2 by one octave per click.
TUNE	Sets oscillator 2's pitch offset.
VCO 2 LEVEL	Sets the main level of oscillator 2.
EG DECAY	Sets the decay time of VCO 2's pitch envelope.
VCO 2 EG AMOUNT	Sets the depth and direction of VCO 2 pitch-envelope movement.
1->2 FM AMOUNT	Uses VCO 1 to frequency-modulate VCO 2.
HARD SYNC	Hard-syncs VCO 2 to VCO 1 for sharper, harmonically locked tones.

04 | NOISE, FILTER AND OUTPUT

Analog percussion voice

Noise adds attack texture. The filter envelope, VCA/LPG behavior and separate drive stages shape the finished hit.

NOISE and FILTER / VCF EG

CONTROL	FUNCTION
NOISE LEVEL	Adds noise to the percussion voice for snare-like, metallic or textured attacks.
CUTOFF	Sets the low-pass filter cutoff, from deep/dark to open/bright.
RESONANCE	Emphasizes frequencies around the filter cutoff.
VCF EG AMOUNT	Sets bipolar filter-envelope depth applied to cutoff.
VCF DECAY	Sets the decay time of the filter envelope.

VCA / LPG and DRIVE / VALVE

CONTROL	FUNCTION
VCA / LPG	Morphs amplitude behavior from a clean VCA toward a natural low-pass-gate response.
DECAY / RING	Controls amplitude and ring decay. Longer values create more sustained resonant percussion.
MATERIAL	Selects LPG character: HARD, WOOD or SOFT.
DRIVE	Sets filter-stage drive independently of the output tube stage.
TUBE GAIN	Sets post-VCA valve saturation, adding warmth, harmonic density and rounded drive.

> **TIP**
>
> For a short, dark hit, start with lower CUTOFF and shorter DECAY / RING. Open CUTOFF or increase DRIVE when you want a brighter or rougher attack.

05 | SEQUENCE

8-step pitch / velocity sequencer

The eight-step grid combines pitch and MIDI-style velocity with per-step probability, ratchets and slide.

CONTROL	FUNCTION
DIR	Sets playback direction: FORWARD, REVERSE, PENDULUM or RANDOM.
LENGTH	Sets the active sequence length from 1 to 8 steps.
PITCH, STEPS 1-8	Sets per-step pitch. Each knob spans up to +/-60 semitones; pitch can be scale-quantized.
VELOCITY, STEPS 1-8	Sets per-step MIDI velocity from 1 to 127.
PITCH RANGE	Sets the minimum and maximum used by the adjacent pitch RANDOM button. It does not retune existing steps.
RANDOM (PITCH)	Generates new pitch values for all eight steps inside PITCH RANGE.
VELOCITY RANGE	Sets the range used by the adjacent velocity RANDOM button.
RANDOM (VELOCITY)	Generates new 1-127 velocity values for all eight steps inside VELOCITY RANGE.

Creative step controls

CONTROL	FUNCTION
PROBABILITY	Per-step trigger chance from 0-100%. At 100% a step always plays; lower values make gaps.
RATCHET	Repeats a played step 1x, 2x, 3x or 4x within its time slot.
SLIDE	Glides pitch from the selected step into the next played step.

> **REMEMBER**
> PITCH RANGE and VELOCITY RANGE set random-generation boundaries. Moving either range does not change an existing pattern.

06 | RANDOM CONTROL

Dual S&H / random CV

S&H 1 and S&H 2 are independent sample-and-hold generators. Each can run freely or in sync, smooth its output and repeat captured random values.

CONTROL	FUNCTION
RATE	Sets how often a new random value is generated. In free mode it acts as a frequency control; with SYNC it selects musical divisions.
SYNC	Switches the generator between DAW-synced divisions and free-running timing.
LOOP	Repeats captured recent S&H values instead of continually generating new random values. The adjacent selector chooses 8, 4, 3 or 2 values; each generator has its own length.
SLEW	Smooths transitions between values. Low values are stepped; higher values glide.
DUAL SCOPE	Shows both signals together: orange for S&H 1 and gold for S&H 2.

The small activity indicators flash when their S&H generators update. Leave LOOP off to hear fresh random motion. When you like a pattern, turn LOOP on to repeat the captured values; turn it off to resume generating new values.

Patch ideas

S&H -> PITCH STEP Create repeating pitch changes. With SCALE enabled, musical steps are quantized after step modulation.

S&H -> FILTER CUTOFF Move the timbre over time.

S&H -> VCO1->VCO2 FM Vary metallic or unstable FM percussion.

S&H -> FLAM TIME Vary or loop flam spacing.

07 | MODULATION

Patch bay / mod matrix

The PATCH BAY / MOD MATRIX provides eight virtual modulation cables. Each P1-P8 slot has a SOURCE, a DESTINATION and a bipolar amount slider.

CONTROL	FUNCTION
P1-P8	Eight independent slots can be combined. Each slot's bipolar slider sets depth from negative to positive; negative values invert direction.
SOURCE	Chooses the modulation signal.
DESTINATION	Chooses the parameter receiving modulation.

Sources

PITCH SEQ; VELOCITY; VCF EG; VCA EG; VCO1 PITCH EG; VCO2 PITCH EG; VCO1 AUDIO; VCO2 AUDIO; NOISE; GATE; KEYTRACK; MOD WHEEL; S&H 1; S&H 2.

Destinations

VCO1 PITCH; VCO2 PITCH; VCO1 PITCH EG AMT; VCO2 PITCH EG AMT; VCO1 EG DECAY; VCO2 EG DECAY; VCO1->VCO2 FM; NOISE LEVEL; FILTER CUTOFF; FILTER RESONANCE; FILTER DRIVE; VCF EG AMOUNT; VCF DECAY; VCA DECAY; VCO1 LEVEL; VCO2 LEVEL; MASTER VOL; TUBE GAIN; HARD SYNC; PITCH STEP 1-8; VELOCITY STEP 1-8; FLAM TIME.

> **TIP**
>
> Start with one patch slot, choose S&H 1 as SOURCE and FILTER CUTOFF as DESTINATION, then raise the amount gradually. Add further slots when you know what each modulation is doing.

Flam and presets

FLAM

CONTROL	FUNCTION
FLAM	Adds a second closely spaced hit to each triggered percussion event.
TIME	Sets the gap between the main hit and the flam hit, approximately 3-80 ms.

If a Patch Bay slot targets FLAM TIME, its modulation is added to the base TIME value at the moment of the trigger. PITCH SEQ or S&H can therefore animate the spacing.

Factory and user presets

The download includes 47 preset files, Preset 001 through Preset 047, with the .pfsubpreset extension. On first launch, TALUS creates Documents\Plugfreak\TALUS\Presets. Copy the files inside the download's Presets folder into that Documents folder, then reopen TALUS. The files appear in USER PRESETS. Preset installation does not depend on activation.

Choose a saved patch from USER PRESETS in the top preset menu. The adjacent left and right arrow buttons move to the previous or next preset without opening the menu.

CONTROL	FUNCTION
SAVE	Overwrites the selected user preset; when none is selected, it behaves like SAVE AS.
SAVE AS	Stores the current patch under a new name.
DELETE	Deletes the selected user preset after confirmation.

09 | HELP

Licensing and support

The first start of the automatic 10-day full-function trial needs an internet connection. To activate a purchased license, open LICENSE, provide the Machine Code if requested or paste your License Key, then choose ACTIVATE.

TOPIC	DETAILS
Computer limit	A license can be activated on up to three computers.
Move a license	On the old computer choose DEACTIVATE, then use ACTIVATE on the new computer.
Offline use	After the last successful paid validation, TALUS can work offline for up to one year. It re-checks quietly in the background when a connection is available.
Validation request	If TALUS asks to validate, open it once while online. It unlocks within seconds; you do not need a new key.
Trial ended	TALUS remains installed and loadable, but produces no sound until activated.

Troubleshooting

TALUS is missing in the DAW. Check that TALUS.vst3 is in C:\Program Files\Common Files\VST3\, that the DAW searches this location, and run a plugin rescan.

A preset is missing. Copy the included .pfsubpreset files into Documents\Plugfreak\TALUS\Presets, then reopen TALUS.

There is no sound after the trial. Open LICENSE and activate with your purchased key.

ABOUT

Click ABOUT next to LICENSE in the top bar to open the product-information window. It shows TALUS, Analog Percussion Synthesizer, Version 1.0.0, the PLUGFREAK copyright notice and plugfreak.com.

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