_TAPE J-37

ARTURIA
_The sound explorers

Special Thanks

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Special Messages

This manual covers how to use Arturia Tape J-37, provides a comprehensive look at its features, and details how to download and activate it. First, some important messages:

Specifications Subject to Change:

The information contained in this manual is correct at the time of printing. However, Arturia reserves the right to change or modify any of the specifications or features without notice or obligation.

IMPORTANT:

The software, when used in combination with an amplifier, headphones or speakers, may be able to produce sound levels that could cause permanent hearing loss. DO NOT OPERATE for long periods of time at a high volume or at a level that is uncomfortable.

If you encounter any hearing loss or ringing in your ears, please consult an audiologist.

NOTICE:

Service charges incurred due to lack of knowledge relating to how a function or a feature works (when the software is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owner's responsibility. Please study this manual carefully and consult your dealer before requesting additional support.

EPILEPSY WARNING — Please Read Before Using Tape J-37

Some people are susceptible to epileptic seizures or loss of consciousness when exposed to certain flashing lights or light patterns in everyday life. This may happen even if the person has no medical history of epilepsy or has never had any epileptic seizures. If you or anyone in your family has ever had symptoms related to epilepsy (seizures or loss of consciousness) when exposed to flashing lights, consult your doctor prior to using this software.

Discontinue use and consult your doctor *immediately* if you experience any of the following symptoms while using this software: dizziness, blurred vision, eye or muscle twitches, loss of consciousness, disorientation, or any involuntary movement or convulsion.

Precautions to Take During Use

- Do not stand too close to the screen
- Sit a good distance away from the screen
- Avoid using if you are tired or have not had much sleep
- Make sure that the room is well lit
- Rest for at least 10 to 15 minutes per hour of use

Congratulations on your purchase of Tape J-37!

Excellence is placed at the heart of every Arturia product, and Tape J-37 is no exception. We are thrilled to bring you this accurate, precise, and enhanced emulation of the most famous and coveted analog tape recorder ever made.

Be sure to visit the www.arturia.com website for information on all our other inspiring hardware and software instruments, effects, MIDI controllers, and more. They have become indispensable tools for many visionary artists around the globe.

Musically yours,

The Arturia team

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Thank you for purchasing Arturia Tape J-37. This audio plug-in for AAX, AudioUnits, VST2, and VST3 formats faithfully reproduces the sound of the legendary Studer J37 reel-to-reel 4-track tape recorder. The J37 is widely acknowledged as the first true multi-track recorder (that is, more tracks than stereo). It launched the modern era of music production in which different instruments and vocals can be recorded on separate tracks for later mixing and processing, and has since become the single most vaunted and collectible tape recorder in the world.

The Studer J37 had a signature sound, thanks to its all-vacuum-tube stages as well as the inherent EQ curve, compression, and gentle saturation of both the machine itself and analog tape in general. Tape J-37 imparts these ineffable qualities to your tracks, sends, or even your master bus. Our development team modeled a pristine Studer J37, and we hope the results speak for themselves.

1.1. The Studer J37 recorder

Photo by Mark Waugh, licensed via Alamy

The Studer company was founded in Switzerland in 1948. Its first products were oscilloscopes, but by the 1950s Studer had become known for high-quality professional tape recorders.

The J37 was introduced in 1964 and recorded four tracks on 1" tape. Each track occupied 1/4" of tape width — the equivalent of the single-track tape machines of the era. This resulted in high audio fidelity even by today's standards.

Abbey Road Studios was one of the first J37 customers, purchasing two units. They were famously used to record The Beatles' album *Sgt. Pepper's Lonely Hearts Club Band*, leading to the often-repeated and half-correct statement that the record was "the first four-track recording." Producer George Martin utilized both machines, bouncing tracks between the two to layer multiple musical parts. This technique was so successful that Abbey Road eventually added a total of eight J37 recorders to its stable.

The J37 was also instrumental in Beatles engineer Ken Townsend's development of artificial double tracking (ADT). In this process, a passage such as a vocal was recorded onto two tape machines at once by routing the signal directly from the playback head of one machine to the recording head of another. The resulting slight delay, along with any miniscule speed variance between the two recorders, thickened the sound without adding echo or other unwanted artifacts.

1.2. Why a Tape J-37 plug-in?

Arturia has long been known for meticulous reproductions of classic instruments and effects. We wanted to bring the sound of the iconic J37 to your musical explorations. Needless to say, the costs and hassles of finding, purchasing, and maintaining a classic multi-track tape recorder – for the main purpose of lending its sonic "X-factor" to tracks – put this kind of project out of the reach of most musicians in the real world.

Tape J-37 puts that "X-factor" inside your DAW. It can put its retro signature on an individual track, give a common character to a group such as vocals or drums, or even be the glue that makes your entire mix warmer and more coherent.

To clear up any possible confusion, Tape J-37 is not a recorder itself; it does not sample and play back audio like a looper. Instead, it makes any or all of your tracks *sound* like they were recorded on a Studer J37. That puts you in esteemed company.

1.3. Tape J-37 feature summary

The main features and functions of Tape J-37 include:

- **Color:** Four selectable sonic profiles based on EQ curve, tape type, and tape age
- **Modern mode:** Bypasses the Studer J37's inherent EQ curve while retaining tape color
- **Drive:** Varies input gain and therefore tape saturation
- **Speed Control:** Simulates the characteristics of 7.5 and 15 ips (inches per second) tape speed
- **VU Meters:** Meters display level and total harmonic distortion (THD), three calibration levels
- **EQ:** Three-band EQ with low shelf, bell, and high shelf
- **Instability:** Variable pitch drift and subtle modulation to simulate analog tape
- **Noise:** Adjustable level of tape hiss
- **Delay:** Looping delay with adjustable feedback, tempo sync, and stereo offset
- **Oversampling:** Select Studio quality for working on your project or Render quality for final mixdown
- **Stereo Offset:** Uses different modeled J37 tracks for left and right channels, subtly widening stereo dispersion
- **Presets:** 25 factory Presets for tape effects from subtle to dramatic
- **A/B settings:** Two sets of parameter settings per Preset; can be copied

2. ACTIVATION AND GETTING STARTED

2.1. Compatibility

Tape J-37 works on computers and laptops equipped with Windows 10 or later or macOS 11 or later. It is compatible with the current generation of Apple M1 and M2, M1 and M2 Pro/Max/Ultra, and other Apple Silicon processors. You can use it as an Audio Unit, AAX, VST2, or VST3 plug-in within your favorite recording software.

2.2. Download and Install

You can download Tape J-37 directly from the Arturia Products Page by clicking either the *Buy Now* or *Get Free Demo* options. The free demo is limited to 20 minutes of operation.

If you have not already done so, now is a good time to create an Arturia account by following the instructions on the My Arturia webpage.

Once you install Tape J-37, the next step is to register the software. This is a simple process that involves a different software program, the **Arturia Software Center**. After logging in, it is also possible to active Tape J-37 from within the plug-in itself. The plug-in will prompt you to do so the first time you insert it on a track.

2.2.1. Arturia Software Center (ASC)

If you haven't installed ASC yet, please go to this web page: Arturia Downloads & Manuals.

Look for Arturia Software Center near the top of the page, and then download the installer version for the system you're using (Windows or macOS). ASC is a remote client for your Arturia account, letting you conveniently manage all your licenses, downloads, and updates from one place.
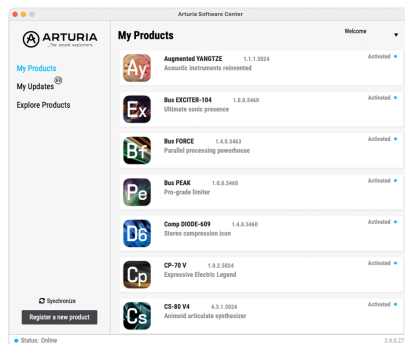
After you complete the installation, do the following:

- Launch the Arturia Software Center (ASC)
- Log into your Arturia account from ASC's interface
- Scroll down to the 'My Products' section of ASC
- Click on the 'Activate' button next to the software you want to start using (in this case, Tape J-37)

It's as simple as that!

2.3. Working with Tape J-37 as a plug-in

Tape J-37 can be used as a *plug-in* within all major Digital Audio Workstation (DAW) programs including Cubase, Digital Performer, Live, Logic, Pro Tools, Reaper, Studio One, and more.

Plug-ins have numerous advantages over hardware, including:

- You can use as many instances on different tracks as your computer can handle.
- You can automate the plug-in's settings via your DAW's automation feature.
- All settings and changes are saved with your DAW project, letting you pick up right where you left off.

2.3.1. Audio and MIDI settings

Since Tape J-37 is a plug-in, settings for audio and MIDI routing are handled in your recording software or DAW. They are generally located in some type of Preferences menu, though each product does things a bit differently. So, consult your recording software's documentation for information on how to select your audio interface, activate outputs, set the sample rate, assign MIDI ports, set project tempo, adjust buffer size, and make other useful settings.

Now that you've set up your software, it's time to lend some analog tape goodness to your sound.

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3. MAIN PANEL

The Main Panel is very simple, with primary controls in three adjacent locations along the front rail of the recorder, plus the top center of the plug-in window:

Location	Control	Description
1.	Color [p.9]	Chooses between four tape/EQ curves, plus modern mode
2.	Drive [p.11]	Adjusts the tape drive and saturation
3.	Transport and speed [p.11]	Starts and stops the "tape"; selects tape speed
4.	VU Meters [p.13]	Level meters and calibration selector

3.1. Common behaviors

All Arturia FX Collection plug-ins share some common control behaviors to make editing sounds easier. (This applies to controls in the Advanced Functions [p.14] as well.)

3.1.1. Value pop-ups

Move or hover on a knob or slider-type control (in Tape J-37 these include the Drive and Main Volume controls) and a pop-up banner or "tool tip" will display its value.

3.1.2. Parameter descriptions

Tape Color 3: Gritty - Old SM468 Tape calibrated on american EQ (NAB)

Operating or hovering on any control also displays its name and a brief description of its function in the left corner of the lower toolbar [p.25].

3.1.3. Fine tuning

Hold the right mouse button or Control key while dragging on a knob (or other continuous-value control) to adjust it more slowly. This helps when you want to dial in precise values.

3.1.4. Double-click for default

Double-click on any knob or continuous-value to return it to its factory default setting. This does not apply to "radio button" type controls such as Color where the selection is "either-or."

3.2. Color

When we were developing Tape J-37, we modeled the sounds of four different combinations of tape type and calibration. Musically speaking, they add increasing non-linearity, warmth, and "dirt." These are selected by radio buttons on the left side of the control rail. Only one can be selected at a time. From left to right, the options are:

Color	Tape Type	Tape Age	Equalization
Pristine	SM911	New	European (CCIR)
Warm	SM911	New	American (NAB)
Dirty	SM468	Old	American (NAB)
Dirtiest	SM468	Old	American (NAB), overbiased

As you progress from Pristine through the other settings, notice that the left (supply) tape reel changes color from silver to yellow to orange to red.

3.2.1. Modern mode
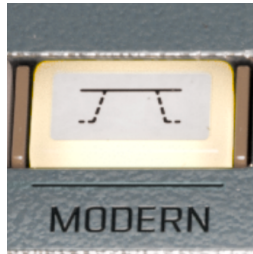
The Studer J37 recorder's input amplifiers had a natural EQ curve, chiefly some rolloff at low and high frequencies. Tape J-37 captures these accurately. Engaging Modern mode removes them, but retains all character associated with the chosen **Color** setting.

3.2.2. Tape terms for beginners

By the 2020s, at least two or three generations of musicians have made great recordings without ever touching analog tape. So, the terms above may be unfamiliar. If you're curious, here's a quick overview.

SM911 and **SM468** refer to types of analog tape. SM911 is a normal-bias reel-to-reel tape that is still manufactured by a company called Recording the Masters (RTM). RTM also makes SM468, the modern equivalent of a vintage tape produced by BASF.

Equalization in the context of analog tape does not refer to grabbing a knob or fader on a channel EQ. It *is* a frequency adjustment: It compensates for treble loss during recording, which is inherent to tape. CCIR (Consultative Committee for International Radio) and NAB (National Association of Broadcasters) are two organizations that created standards for matching the required amount of EQ to the tape formulation.

Bias is a word familiar to cassette tape fans. It refers to a signal 40 to 150kHz (above human hearing range) added to the program material. Why? Because the physical nature of magnetic tape needs a "push" for the particles to magnetize and retain the recorded signal with the best possible dynamic range and frequency response. Higher-amplitude bias signals increase the recording quality up to a point. Past that point it is considered *overbiased*. This can add grunge and other non-linearities, as in Tape J-37's fourth Color setting.

3.3. Drive

As Tape J-37's **Drive** knob is increased, it conveys a hotter signal to the virtual tape. This perfectly emulates the saturation and compression of analog tape, and even adds some distortion at higher settings. Drive is *gain-compensated*, so turning it up or down does not drastically affect the output level of the plug-in. There is some change, but it won't overload your track.

3.4. Transport and speed
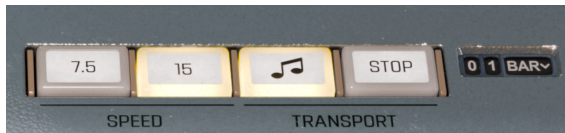
This section is home to tape speed and start/stop controls, as well as a menu [p.12] that lets you adjust the start and stop behavior of Tape J-37.

3.4.1. Tape Speed

You can select between tape speeds of 7.5 or 15 inches per second (IPS), which were two professional recording standards. When Animation [p.26] is turned on in the lower toolbar, the tape reels will rotate slower or faster depending on which speed is selected.

3.4.1.1. Which tape speed to use?

There is a long-running and passionate debate among audio enthusiasts about whether 7.5 or 15 ips is "better" – and hence which speed to select in a tape emulation plug-in such as Tape J-37. In general, 15 ips gives a fuller and more even frequency response, and is considered higher-fidelity given that more tape is used to record a given duration of signal. When audio editing meant cutting the tape with a razor blade and splicing it back together, it was easier to perform precise edits on tape recorded at 15 ips.

On the other hand, 7.5 ips exposed a given length of tape to more signal for a longer duration, resulting in more saturation of the magnetic particles. This usually resulted in increased low-end response at the expense of slightly attenuated treble, which many listeners experienced as a "warmer" sound. Also, 7.5 ips doubled the recording time of the same length of tape – no small matter because reels of analog tape were (and are) expensive.

3.4.2. Start and Stop

The Stop button emulates how the sound slows down and decreases in pitch when a tape recorder is halted but still passing signal. The Start button (musical notes) restarts the playback. When you click Stop, *only* the sound of the track(s) on which Tape J-37 is inserted will be affected, and will come to a complete stop in an amount of time determined by the settings in the menu below.

> ℹ️ You can also perform a momentary stop or slowdown by clicking and holding on the tape reels, rollers, or tape itself in the "mechanicals" of Tape J-37.

3.4.2.1. Start/Stop menu

Click on the "Bar" and counter icon to the right of the Stop button to bring up the Start/Stop menu.

Stop Time: Adjusts how long the tape reels take to come to a complete stop, and is synced to bars based on your project tempo.

Start Mode: Offers two options for how the sound restarts when you click the Start button:

- *Instant:* Sound restarts immediately at its natural pitch and tempo
- *Fast Forward:* Sound comes back up to pitch and speed in proportion to selected stop time
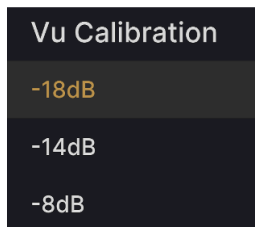
3.5. VU Meters

Tape J-37 has stereo VU meters that display the level in dB and the total harmonic distortion (THD). It's important to remember that since Tape J-37 is gain-compensated to have a steady output signal, these meters represent what an actual J37 *would* be printing to tape under circumstances corresponding to the plug-in's Color and Drive settings. So, the meters in Tape J-37 could be deeply in the red while the DAW track where it is inserted is not even close to clipping.

You will hear more compression and possibly distortion at higher Drive and/or "dirtier" Color settings but, again, this is generated by the plug-in as part of the intended effect. Nothing bad is happening to your track(s) at the DAW level.

3.5.1. VU Calibration

The values represent the level Tape J-37's meters interpret as 0dB

Because of the gain compensation described above, Tape J-37 provides three calibration settings to optimize the visual feedback provided by the VU meters. Click on **VU Calib** between the meters to bring up the calibration menu. The three values correspond to the level of the incoming signal from the DAW that Tape J-37's VU meters display as 0dB. So, a setting of -18dB is most sensitive to signal peaks, while -8dB is the most forgiving.

4. ADVANCED FUNCTIONS

Clicking the **Advanced** button at the right of the upper toolbar displays the Advanced functions, which appear to either side of the VU meters at the top half of the Tape J-37 window. The Advanced functions comprise a handful of settings and effects to further sculpt your sound: 3-band EQ [p.14], instability and noise settings [p.16], and a delay [p.17].
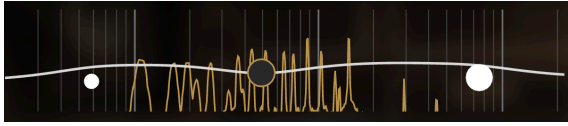
4.1. EQ

Click the toggle switch at the top left to enable or bypass the EQ. Bypassing it preserves any settings you've made. The EQ has three bands: a low shelf, mid bell, and high shelf. You can select a band by clicking on the **Band** parameter to show a menu:
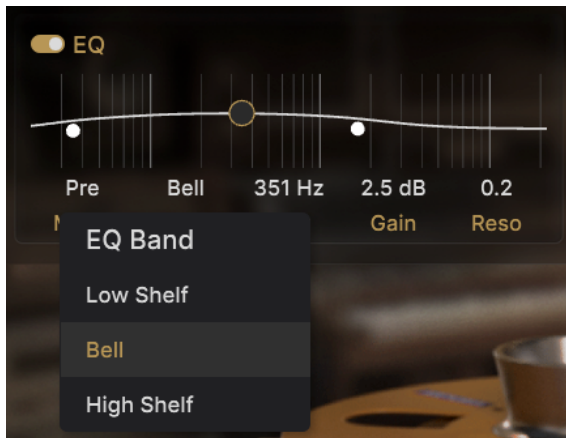

You can also select the band by clicking on one of the three dots in the visualizer:

You can then drag up or down on the numerical fields – or move the dot – to adjust the band's settings:

- **Freq:** Determines the frequency of each band (drag dot horizontally)
- **Gain:** Adjusts the boost or cut in dB of each band (drag dot vertically)
- **Reso:** Changes behavior at the selected frequency in one of two ways:
    - *High and low shelves:* Adds a "bump" or "knee" at the rolloff frequency
    - *Midrange bell:* Adjusts the width of the peak or notch on either side of the center frequency

4.1.1. EQ Mode
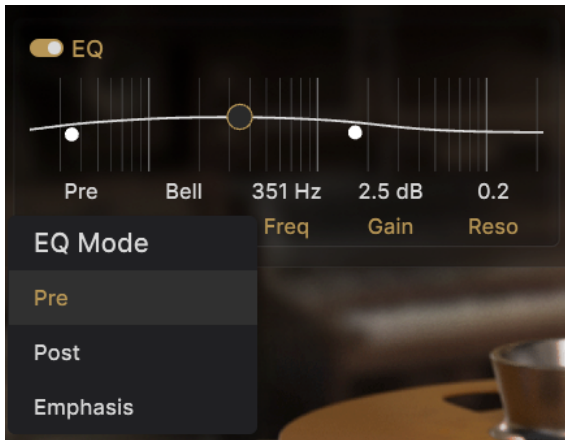
Click on **Mode** at the lower left of the EQ section to select the EQ position in the signal chain:

- *Pre:* EQs the signal before tape processing
- *Post:* EQs the processed Tape J-37 signal
- *Emphasis:* EQ's the input signal and applies the reverse settings to the processed signal

Emphasis cancels out any changes the EQ would otherwise make to the frequency response. So, why include it at all? Because it does change the distortion profile – boosted frequencies will be more subject to saturation/distortion at a given Drive and Color setting, and cut frequencies will sound cleaner.

4.2. Calibration
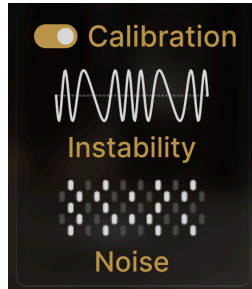
The Calibration section controls two behaviors associated with the "vintage" sound of analog tape recorders.

Click the toggle switch at the top left to enable or bypass Calibration. Bypassing it preserves any settings you've made.

### 4.2.1. Instability

*Instability at zero*

Instability at max

When a strip of tape is moved by motors over recording and playback heads, it exhibits some irregularities in speed and alignment. This is heard as small variations of pitch and speed or "wow and flutter" in tape parlance. (In general, wow is slow at less than 1Hz; flutter is faster, like LFO modulation.)

Drag up and down on the Instability graphic to adjust this setting. When Stereo Offset [p.26] is turned on, this modulation will be in stereo, adding a slightly chorus-like sound.

4.2.2. Noise
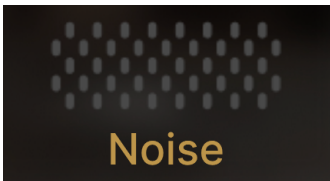
Noise at zero
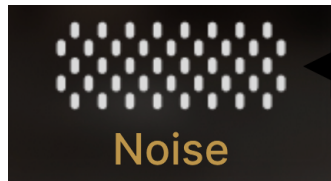
Noise at max

With tape, some hiss is unavoidable. With Tape J-37, though, you can have none, a lot, or anything in between. It will be heard even if your DAW is stopped, but will fade away and restart along with the input signal when you use Tape J-37's Start and Stop [p.12] buttons.

Drag on the Noise area to increase or decrease the amount. Notice that as you increase, more dots in the grid light up. Like with Instability, the noise will be in stereo when Stereo Offset is engaged.

4.3. Delay
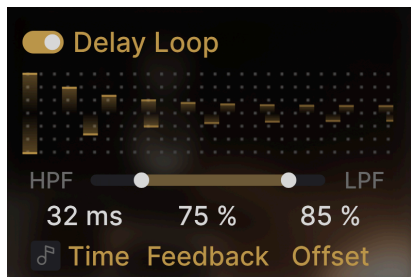
Tape J-37 includes a delay that feeds back through the tape processing, with the delay stage inside the feedback path. This can add anything from subtle flanging to a pronounced slapback effect. Click the toggle switch at the top left to enable or bypass the Delay. Bypassing it preserves any settings.

4.3.1. Delay Time and tempo sync

Drag up or down on the **Time** numerical field to adjust the delay time. The delay can free-run or sync to bars in your project tempo. Click the musical note icon to show the sync menu:
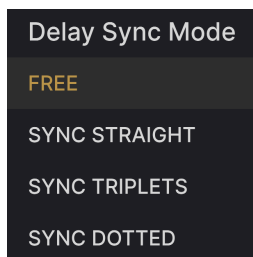
- **Free:** Delay is not synced to tempo and shown in milliseconds (10ms - 1000ms i.e. one second)
- **Sync Straight:** Tempo is synced "straight" with no swing feel; a quarter-note = two eighth-notes
- **Sync Triplets:** Tempo is synced with a triplet feel; a quarter-note = three eighth-notes played in the space of two
- **Sync Dotted:** Tempo is synced with a dotted feel; a quarter-note = a dotted eighth-note followed by a sixteenth-note

When synced, the delay time is shown in divisions or multiples of musical bars, with the suffixes *t* for triplet and *d* for dotted values.

4.3.2. Feedback and Offset

Drag up or down on these numerical fields to change the values.

- **Feedback:** Adjusts the amount of post-delay signal fed back into the input of the tape
- **Offset:** Introduces a difference in delay time between the left and right stereo channels

> ℹ The processed signal is delayed once, gain-adjusted (per the Feedback amount) and fed back into the input of the tape effect. Unlike most delays, it is not a separate signal chain, which is why there is no dry/wet mix control. Each successive occurrence of delay will sound more driven.

4.3.3. HPF and LPF

The Delay includes a horizontal slider that lets you adjust a high-pass (low cut) and low-pass (high-cut) filter. Due to the structure of the delay path in Tape J-37, the high- and low-pass filters are in the feedback loop. This means each successive occurrence or tap of delay (higher Feedback = more occurrences) will be filtered again. So, the cut becomes steeper and steeper as the delay continues.

4.3.4. Delay visualizer

The graphical visualizer of the Delay gives information at-a-glance about the Delay settings. When Delay is tempo-synced, there is a correspondence between the number of vertical amber bands along the horizontal access and the number of taps heard. These change when adjusting the **Time** parameter.

The height of the bands varies with the **Feedback** parameter, and the bars at the top and bottom of each band signify the left and right extremes of the stereo field.

When adding **Offset**, the right/bottom band borders shift horizontally relative to the top/left ones, like so:

Delay shown with a 50 percent offset
between left and right channels

5. THE TOOLBARS

The toolbars above and below the main control area of Tape J-37 contain a number of important functions for Preset selection, housekeeping, and other utility settings.

The Upper Toolbar includes:

- The Main Menu [p.20]

- The Preset Name Pane and Preset Browser [p.31] access button

- Switching and copy options for A and B settings [p.24]

- The button to open the Advanced Panel [p.14]

- A main Output Volume [p.24] knob

The Lower Toolbar includes:

- The parameter description area [p.9]

- Drop-down menu for audio processing quality [p.25]

- A Stereo Offset [p.26] toggle to introduce subtle variation between the channels

- A toggle to turn tape machine Animation [p.26] on and off

- The Bypass [p.26] button

- Undo, Redo, and History [p.27]

- The CPU Meter [p.28] and Panic [p.28] functions

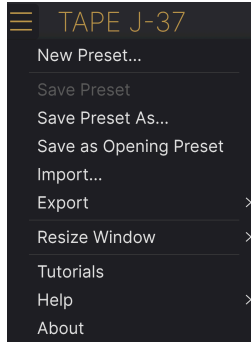- A corner grab handle [p.28] for resizing the Tape J-37 window

5.1. Upper Toolbar

Let's start with the Upper Toolbar, covering its functions from left to right.
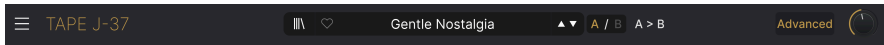
5.1.1. Main Menu

Clicking the "hamburger" icon (three horizontal lines) in the top left corner of the upper toolbar opens the Main Menu, a drop-down menu that lets you access a number of useful functions related to Preset management and more.
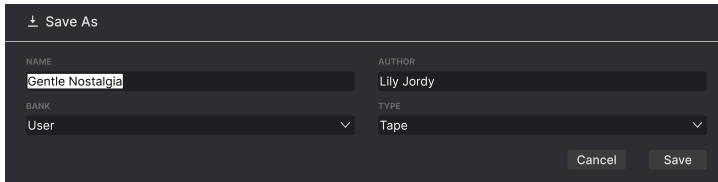
5.1.1.1. New Preset

Creates a new Default Preset with initialized settings for all parameters.

5.1.1.2. Save Preset

Overwrites the current Preset with any changes you have made. This applies only to user presets, so this option is greyed out for factory presets.
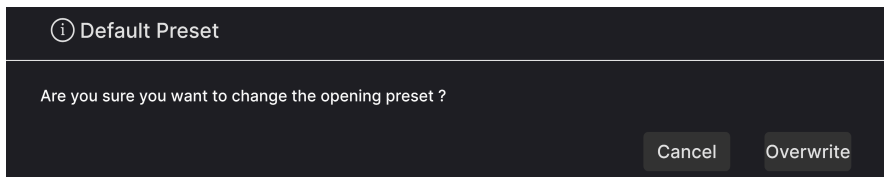
5.1.1.3. Save Preset As...

This option saves the current settings of Tape J-37 under a new Preset name. Clicking this option reveals a window where you can name your Preset and enter more detailed information about it:

### 5.1.1.4. Save as Opening Preset

This option specifies the current Preset (Factory or User) as the one that will open when Tape J-37 is first placed on a track in your DAW project. If you choose a factory Preset, it will open with factory settings.

5.1.1.5. Import...

This command lets you import a Preset file or entire Bank stored on your computer. It opens a navigation window in your computer's OS to find the proper files.

5.1.1.6. Export...

You can export Presets to your computer in two ways: as a single Preset, or as a Bank. In either case, an OS-level navigation window lets you specify where to save the file(s). Both individual Presets and Banks have the filename extension *J37X*.
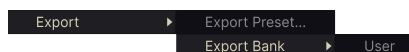
- **Export Preset...:** Exporting a single Preset is handy for sharing a preset with someone else. The saved preset can be reloaded using the **Import** menu option.

- **Export Bank:** This option exports an entire Bank of Presets, which is useful for backing up or sharing many Presets at once. Saved Banks can be reloaded using the **Import** menu option.

5.1.1.7. Resize Window
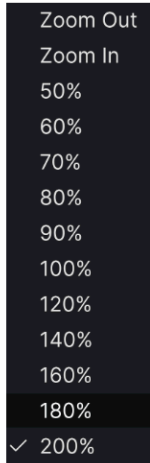
Tape J-37 can be resized from 50% to 200% of its default size (100%) while presenting a clear and crisp interface. On a smaller screen, such as a laptop, you may want to reduce the interface size so it doesn't dominate the display. On a larger screen or a second monitor, you can increase the size to get a better view of the controls and graphics.

You can also perform this operation using keyboard shortcuts: every time you press CTRL- (Windows) or CMD- (macOS), the window will shrink by one size increment, and every time you press CTRL+ (Windows) or CMD+ (macOS), the window will grow by one size increment.

In addition, you can click-drag the resize handle [p.28] at the right of the lower toolbar. When you release the handle, the window will snap to the closest size.

5.1.1.8. Tutorials
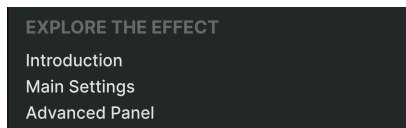
Tape J-37 comes with interactive tutorials that walk you through different features of the plug-in. Clicking this option opens interactive tutorials, which appear on the right side of the plug-in window. Select one to access step-by-step descriptions that highlight the relevant controls and walk you through the process.

5.1.1.9. Help

Get more help by visiting links to this user manual and Frequently Asked Questions pages on Arturia's website. You will need an internet connection to access these pages.

5.1.1.10. About

Here you can view the software version and developer credits. Click again anywhere on the screen (outside the About window but inside the plug-in) to make this pop-up window disappear.

5.1.2. Preset Browser access and Name Pane

The Preset Name Pane

Clicking the "books on a shelf" button opens the Preset Browser [p.31], which offers a myriad of ways to browse, sort, and organize Presets in Tape J-37.
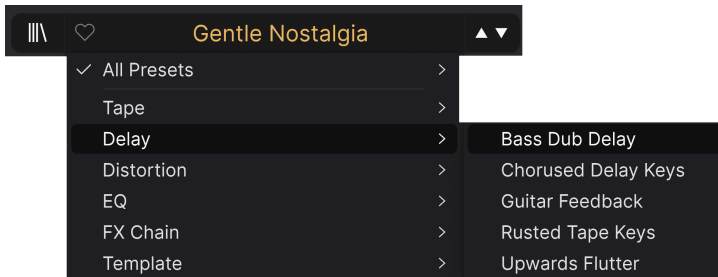
Clicking on the Preset name also opens up a quick drop-down menu for selecting Presets outside of the Browser, as shown above. You can select a category to look at lists of Presets organized by purpose, as shown above, or look at *All Presets* at once.

Everything you need to know about managing Presets is covered in detail in the next chapter [p.31]. This includes working with Favorites, which are tagged by clicking the heart icon.

> ℹ **Note:** An asterisk just after the name in the Preset Name Pane (*) indicates that you've edited that Preset.

5.1.3. Dual settings and copy

Preset state A active with the option to copy settings to B

Preset state B active with the option to copy settings to A

Each Preset is actually two Presets in one! Using the A and B buttons, you can switch between two completely different sets of knob settings for the Main Panel [p.8], and the Advanced Panel [p.14]. These are saved within each Preset.

When A is active, clicking **A > B** will copy the A settings to B. When B is active, clicking **A < B** will copy the B settings to A.

> ℹ ! When you edit settings in a Preset and close your DAW project without saving the Preset, the changes will be remembered when you reopen it – but they will be recalled in Slot A. That means that editing settings in Slot B and closing your DAW without saving them will move those settings over to Slot A when you reopen the project – and Slot B will be blank. Save often!

5.1.4. Advanced Button
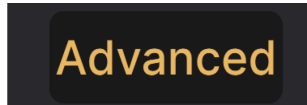
Near the upper right corner of the top toolbar is the **Advanced Button**. This opens up a panel of extended controls, which we cover in detail in the Advanced Functions [p.14] chapter.

5.1.5. Output Volume

This is simply a main output level control, which you can use to adjust the overall volume of the signal processed through Tape J-37 in your track. You may wish to do so without having to click through windows to get to the fader in your DAW mixer, and this makes that convenient.

5.2. Lower Toolbar

The Lower Toolbar of the Tape J-37 interface can be thought of in terms of left and right halves. On the left is the Control Description display, and on the right are buttons for several useful utility functions.
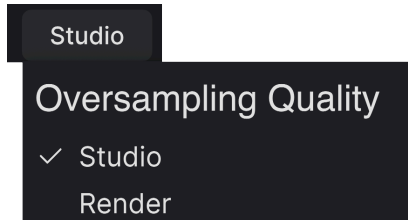
5.2.1. Parameter Descriptions

This Control Description pops up when you mouse over one of the Color selection buttons

Operate or hover on any knob, button, icon, or other control, and a brief description of what it does appear in the lower left-hand corner.

5.2.2. Oversampling Quality

Select studio or render quality oversampling in this menu

This button in the Lower Toolbar helps you balance audio quality and CPU resources.

- **Studio:** Ideal for tracking, mixing, and working with Tape J-37 alongside other plug-ins such as virtual instruments and more audio effects
- **Render:** Ideal for final mixdown

This is a good-better difference. Studio quality is more than enough for composing and mixing; Render quality is ideal for printing or bouncing your final mix.

5.2.3. Stereo Offset

When we modeled the hardware Studer J37, we used different tracks on it for the left and right channels. There are slight variations between the responses of these two channels, giving you subtly more stereo depth if desired.

- **On:** Left channel uses tape recorder track 1; right channel uses track 3
- **Off:** Left and right channels use tape recorder track 1

When Stereo Offset is on, Instability and Noise in the Calibration [p.16] settings are in stereo. When it's off, they are identical on both channels.

5.2.4. Animation

The tape reels and mechanism in Tape J-37 can move or stay still when the plug-in is in use. Toggling Animation off saves a small amount of CPU resources on older computers, and is also useful if you find the moving reels visually distracting.

5.2.5. Bypass

The Bypass button

The **Bypass** button bypasses the Tape J-37 plug-in entirely. Among its uses are doing a quick comparison of dry versus processed signal without having to bypass the plug-in at the DAW level.

5.2.6. Undo, Redo, and History

*Left to right: undo, history, and redo
buttons*

When editing a plug-in, it's all too easy to overshoot the sweet spot for one or more controls, and then wonder how to get back to where you were. Like all Arturia plug-ins, Tape J-37 offers comprehensive Undo, Redo, and History functions so that you always have a safe way back.

Use the arrows to go back and forward one control movement at a time.
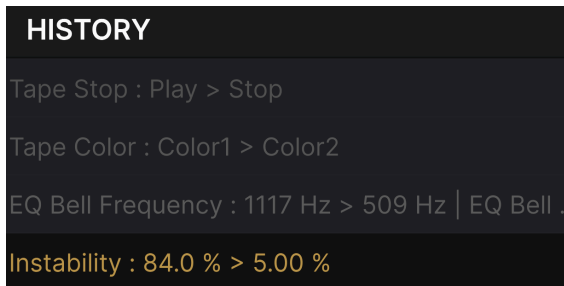
5.2.6.1. Undo

Click the left arrow to revert to the state before the most recent edit you made. You may click repeatedly to undo several edits in reverse time order.

5.2.6.2. Redo

Click the right arrow to redo the most recent edit you undid. If you have undone several, you may click repeatedly to redo them in forward time order.

5.2.6.3. History

Click the center "hamburger" (three lines) button to open the History window, as shown above. This provides a step-by-step account of every move you have made in Tape J-37. Clicking on an item in the list not only re-executes that move — it returns the plug-in to the overall state it was in when you first made that move.

> ℹ️ Note that the A and B parameter value sets within a Preset have separate Undo histories.

5.2.7. CPU Meter

At far right is the **CPU Meter**, which displays the overall load Tape J-37 is placing in your computer CPU. Since it deals only with this plug-in, it is not a substitute for the resource metering tools in your DAW.

5.2.7.1. Panic

Mousing over the CPU Meter accesses the PANIC function

Mouse over the CPU Meter, and it will display the word PANIC. Click to send an all-sounds-off command that silences any sound processed through Tape J-37. This is a momentary command, so sound will resume if your DAW is still playing.

In the event of serious runaway audio (say, from an unrelated delay effect that has gone into a feedback loop), stop your DAW playback and disable the plug-in causing the problem.

5.2.8. Resize handle
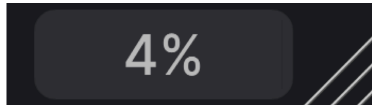
Grab and drag the diagonal lines to the right of the CPU meter to resize the plug-in window. Release the mouse button, and the window will snap to the nearest size from the Resize Window [p.22] menu.

5.2.8.1. Max View button

Sometimes, you may see the above button with two diagonal arrows appear over the resize handle. This happens when, for some reason, the window size is not displaying all of the controls of Tape J-37. Click it to restore a full view of the open controls.

6. SELECTING PRESETS
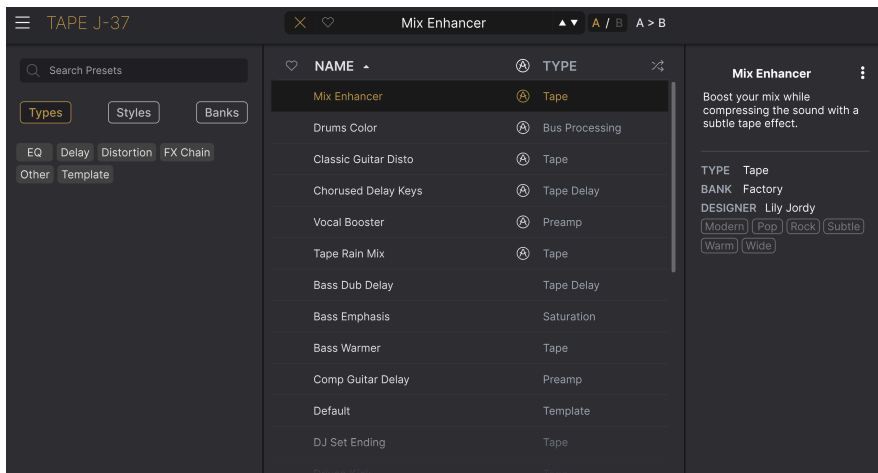
Tape J-37 lets you browse, search, and select Presets from a browser-like interface inside the plug-in. You can also create and save your own Presets in the User Bank. Of course, the state of any instance of the plug-in – including the current Preset – is automatically saved when you save your DAW project, so you can always pick up where you left off.

First, we will cover Preset functions from the Upper Toolbar in more depth.

6.1. Preset Name Pane
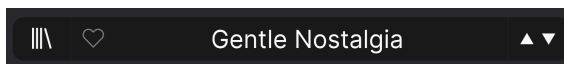
The name pane at top center is always displayed whether you're in the main controls view or the Preset Browser. It displays the name of the current Preset, obviously, but also offers further ways to browse and load Presets. Again, a filled-in heart icon indicates a liked Preset.

6.1.1. The Arrows

The up and down arrows to the right of the Preset name step serially through Presets. This is limited by the results of any currently active search, i.e. the arrows will only step through those Presets. So, make sure any searches are cleared if you simply want to step through all available Presets until you find something you like.

6.1.2. Quick Browser

As mentioned briefly in the previous chapter, you can click on the Preset name in the center of the upper tool bar to bring up a drop-down Quick Browser for Presets. The first option in this menu is called All Presets, and it brings up a submenu of every Preset in Tape J-37.
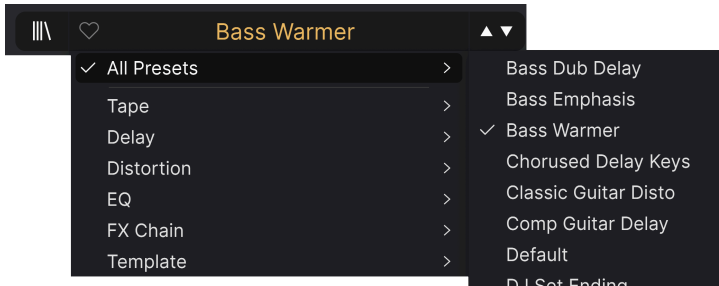
All presets

Below this are options that correspond to the Types [p.32]. Each of these brings up a submenu of all Presets of its Type:
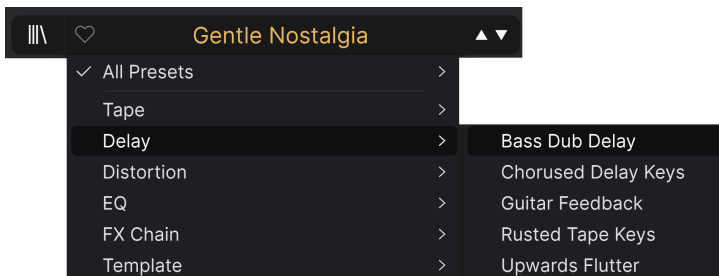

Selecting Delay from the drop-down menu shows all the Presets of this type

Unlike the up and down arrows, the "All Presets" submenu is independent of search criteria – it simply shows you every Preset available. Likewise for the Type choices below the line, which always include all Presets within that Type.

6.2. The Preset Browser

Click the "books on a shelf" icon (four vertical and tilted lines) in the Upper Toolbar to access the Preset Browser. When the Preset Browser is open, the icon becomes a large X, and is used to close the Browser when you're done.

The three main areas of the Preset Browser are as follows:
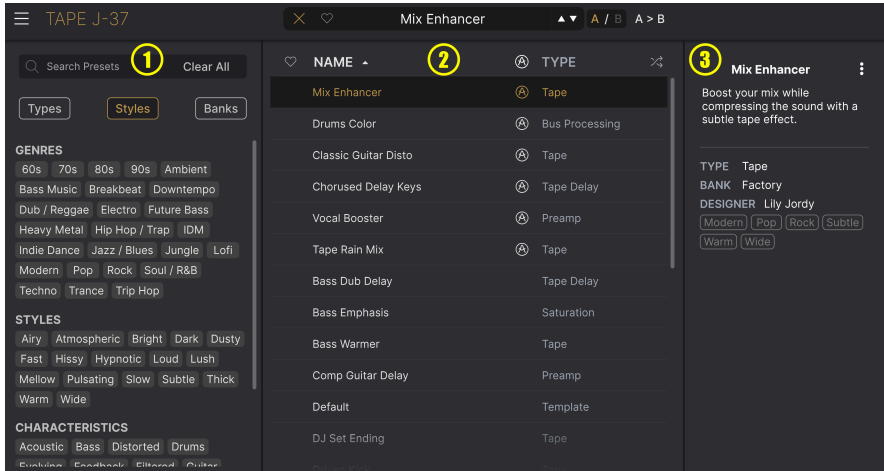
Number	Area	Description
1.	Search [p.31]	Searches for Presets by text entry with filters for Type, Style, and Bank.
2.	Results Pane [p.34]	Displays search results, or all Presets if no search criteria are active.
3.	Preset Info [p.36]	Displays Preset Details; can edit details for Presets in User Bank.

6.3. Searching Presets

Click on the Search field at the top left and enter any search term. The browser will filter your search in two ways: First, simply by matching letters in the Preset name. Second, If your search term is close to that of a Type or Style [p.32] it will include results fitting those tags as well.

The Results Pane will show all Presets that fit your search. Click the **CLEAR ALL** text to clear your search terms.
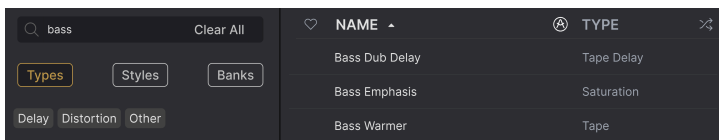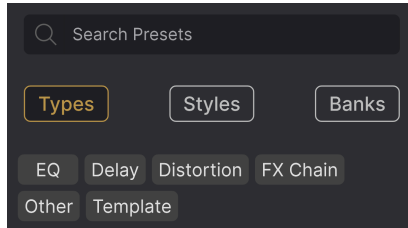

Filtering by typing the text ("bass") in the Search field

6.3.1. Using Tags as a Filter

You can narrow (and sometimes expand) your search using different *tags*. There are two kinds of tags: **Types** and **Styles**. You can filter by one, the other, or both.

6.3.1.1. Types and Subtypes

Types in Tape J-37 are tags that correspond to applications, such as Tape, Delay, Distortion, EQ, and Effects Chain. With a clear search bar, click the **Types** drop-down to bring up the list of types. Types sometimes include Subtypes that describe the musical or audio purpose more specifically.

> ℹ️ You can specify the Type and Subtype when saving a Preset [p.21], using the contextual Type menu. That Preset will then show up in searches where you've selected that Type. The categories of Presets in the quick drop-down menu [p.30] correspond to Subtypes, i.e. specific purposes or musical goals for the plug-in's processing. Likewise, Subtypes are the type of tag displayed in the Type column of the Results Pane [p.34].
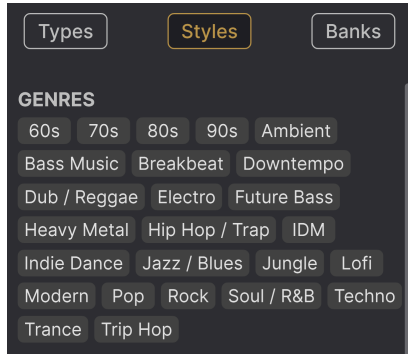
The display order of the Name and Type columns can be inverted by clicking the arrow buttons to the right of their titles.

> ℹ️ ♪ You can specify the type when saving a Preset [p.21]. That Preset will then show up in searches where you've selected that Type.
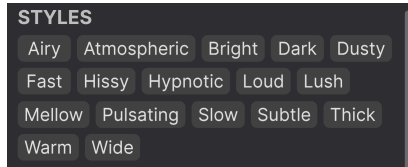
6.3.1.2. Styles

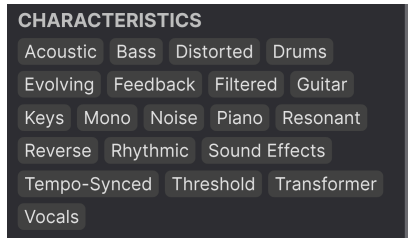Styles are, well ... exactly that. Accessed by the **Styles** button, this area has three further subdivisions:

- *Genres*: Identifiable musical genres such as Ambient, Bass Music, Industrial, etc.:

Types	Styles	Banks

GENRES

60s   70s   80s   90s   Ambient
Bass Music   Breakbeat   Downtempo
Dub / Reggae   Electro   Future Bass
Heavy Metal   Hip Hop / Trap   IDM
Indie Dance   Jazz / Blues   Jungle   Lofi
Modern   Pop   Rock   Soul / R&B   Techno
Trance   Trip Hop

- *Styles*: General "vibe" such as Bizarre, Metallic, Slammed, etc.:

STYLES

Airy   Atmospheric   Bright   Dark   Dusty
Fast   Hissy   Hypnotic   Loud   Lush
Mellow   Pulsating   Slow   Subtle   Thick
Warm   Wide

- *Characteristics*: Even more detailed audio qualities such as Filtered, Resonant, Mechanical, Noise, and more:

CHARACTERISTICS

Acoustic   Bass   Distorted   Drums
Evolving   Feedback   Filtered   Guitar
Keys   Mono   Noise   Piano   Resonant
Reverse   Rhythmic   Sound Effects
Tempo-Synced   Threshold   Transformer
Vocals

Click any one, and the results will show only Presets that match that tag. Notice that when you select any tag, several other tags usually grey out and become unavailable. This is because the browser is *narrowing* your search by a process of elimination.

> ℹ Note that this is the opposite of how selecting multiple Types *broadens* your search.

Deselect any tag to remove it and widen the search without having to start all over again. You can also clear the tag by clicking the X to the right of its text, which appears at the top.
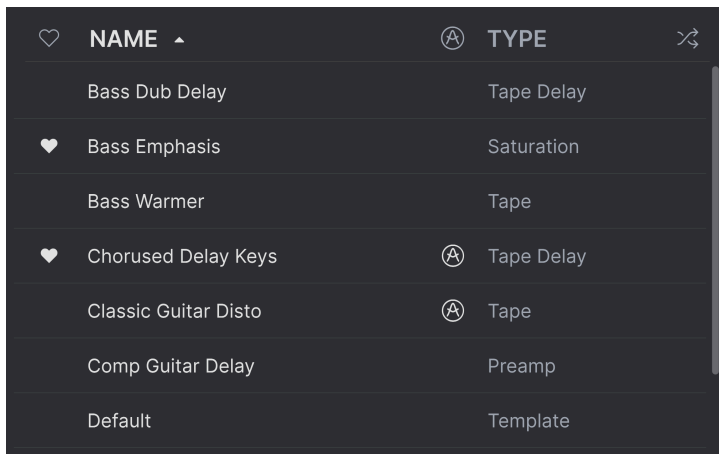
Note that you can search by a string of text, Types and Styles, or both, with the search becoming narrower as you enter more criteria. Clicking **Clear All** in the search bar will remove all Type and Style filters as well as any text entry.

6.3.2. Banks
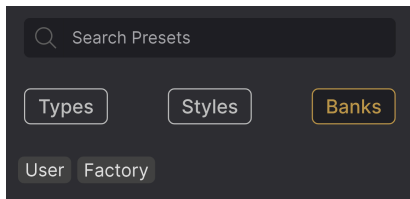
To the right of the **Types** and **Styles** drop-down buttons is the **Banks** button, which lets you do your search (using all the methods above) within the Factory or User Banks. When you first use Tape J-37, only the Factory bank is shown, but the User bank will appear as soon as you save a user Preset. Likewise, if you create other banks, they will appear here.

6.4. The Results Pane

The central area of the browser shows search results, or simply a list of all Presets in the Bank if no search criteria are active. Simply click on a Preset name to load it.

6.4.1. Sorting Presets

Click the **NAME** header in first column of the Results list to sort the results list of Presets in ascending or descending alphabetical order.

Click the **TYPE** header in the second column to do the same thing by Type.

6.4.2. Liking Presets

As you explore and create Presets you can mark them as Liked by clicking the heart icon next to their names. (This icon also appears in the Upper Toolbar's Preset Name Pane [p.29].

Clicking on the heart icon makes all of your liked Presets show up at the top of the results list, as shown here:
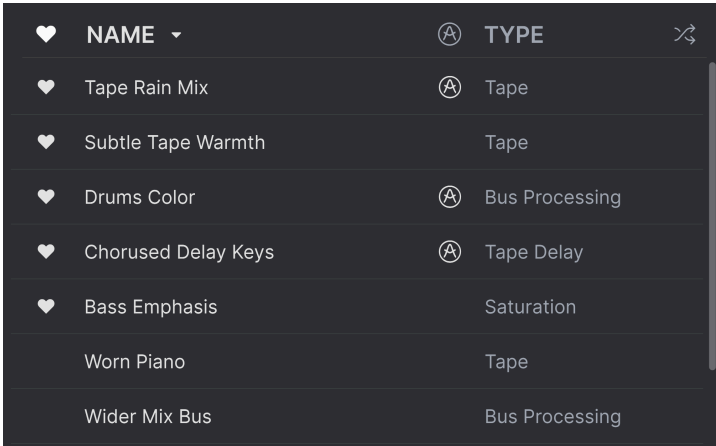
A filled-in heart icon indicates a Liked Preset. An outline indicates a Preset that has not been Liked (yet). Click the heart at the top of the list again to return the list to its previous state.

6.4.3. Shuffle Button

This button randomly reorders the Preset list. Sometimes it can help you find the sound you're looking for more quickly than scrolling through the entire list.

6.4.4. Featured factory Presets

Presets accompanied by the Arturia logo are factory creations we think really showcase the capabilities of Tape J-37.

♡	NAME ▲	Ⓐ	TYPE	⤭
	Mix Enhancer	Ⓐ	Tape	
♥	Drums Color	Ⓐ	Bus Processing	
	Classic Guitar Disto	Ⓐ	Tape	
♥	Chorused Delay Keys	Ⓐ	Tape Delay	
	Vocal Booster	Ⓐ	Preamp	
♥	Tape Rain Mix	Ⓐ	Tape	
	Bass Dub Delay		Tape Delay	

Clicking the Arturia icon at the top of the Results pane sorts all featured Presets to appear at the top of the list.

6.5. Preset Info Section

The right side of the browser window shows specific information about each Preset.

Gentle Nostalgia

Wrap your instrumental tracks or vocals with this nostalgia-inducing tone, complete with mid-high range feedback to add wings to your sound.

TYPE   Tape
BANK   Factory
DESIGNER   Lily Jordy

90s   Feedback
Hip Hop / Trap   Lofi   Lush
Mellow   Soul / R&B   Trip Hop
Warm

For Presets in the User bank (as the result of a *Save As* operation), you can enter and edit the information in the Preset Info Section and it will update in real time. This includes the designer (author), Type, all Style tags, and even a custom text description at the bottom.

To make the desired changes, you can type directly in the text fields or use one of the pull-down menus to change the Bank or Type. As shown here, you can also use a hierarchical menu to select the Type or even create a new Type or Subtype.

Delay	>	Creative Delay
Distortion	>	Looper
Dynamics	>	Modulated Delay
EQ	>	Multi-tap Delay
Experimental	>	Slap Delay
FX Chain	>	Tape Delay
Filter	>	Analog Delay
Modulation	>	Digital Delay
Other	>	Doubler
Pitch	>	M/S Delay
Reverb	>	Ping-Pong Delay
Rhythmic	>	+ New
Stereo	>	
Template	>	
Texture	>	

♪ Types and Styles changes you make here are reflected in searches. For example, if you remove the "Subtle" Style tag from a Preset and then save that Preset, it will not show up in future searches for Subtle Presets.

6.5.1. Preset Info Quick Menu

Clicking the icon with three vertical dots brings up a quick menu for Save, Save As, and Delete Preset operations:

Save
Save As
Delete Preset
Copy To Bank >
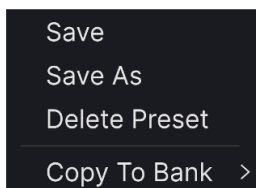
For sounds in Factory banks, only **Save As** is available.

The **Copy to Bank** operation performs two tasks at once: It makes a copy of the current Preset, and saves it in a User bank, selected via a contextual menu in the drop-down. Any User banks you have created and custom-named, either in Tape J-37 or in other Arturia FX Collection plug-ins, will appear in this menu.

6.5.2. Edit Style

You can also create your own Style tags to help refine searches according to criteria that matter most to you. Clicking on the + icon in the list in the Preset Info pane opens the Edit Style pane, where you can create as many new tags as you may ever need. (Note that this option is available only with User banks.)

6.5.3. Editing Info for Multiple Presets

It's easy to edit information such as Types, Styles, designer name, and text description for several presets at the same time.

Simply hold CMD (macOS) or CTRL (Windows) and click the names of the Presets you want to change in the Results list. Then enter the comments, change the Bank or Type, etc., and save.

> You can edit this information for user Presets. For factory Presets, the only option available is *Copy To Bank*.

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In that case, the product including the software may only be returned within 30 days following the purchase of the product. Upon return, a claim according to § 11 shall not apply.

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The product registration is possible during the activation process or at any later time via the Internet. During this process, you will be asked to agree to the storage and use of your personal data (name, address, contact, email address and license data) for the purposes specified above. Arturia may also forward these data to third parties, in particular its distributors, for support purposes and for verifying the right to an upgrade or an update.

5. Unbundling Prohibited The software typically contains a variety of different files which ensure the complete functionality of the software in its default configuration. The software may be used as one product only. It is not required that you use or install all components of the software.

You must not arrange components of the software in a new way and develop a modified version of the software or a new product as a result. The configuration of the software is not to be modified for the purpose of distribution, assignment or resale.

6. Assignment of Rights You may assign all your rights to use the software to another person only if: (a) you assign to the other person the following: (i) this Agreement, and (ii) the software or hardware provided with the software, subsequently packed or preinstalled, including all copies, upgrades, updates, backup copies and previous versions, which granted a right to an update or upgrade on this software, (b) you do not retain upgrades, updates, backup copies and previous versions of this software, and (c) the recipient accepts the terms and conditions of this Agreement as well as other regulations according to which you acquired a valid software license.

A return of the product due to a failure to accept the terms and conditions of this Agreement, e.g. the product activation, shall not be possible upon this re-assignment of rights.

7. Upgrades and Updates You must have a valid license for a previous or more inferior version of the software in order to be allowed to use a software upgrade or update. Upon transferring this previous or more inferior version of the software to third parties, the right to use the software upgrade or update will not apply.

The acquisition of an upgrade or update does not in itself follow a right to use the software.

The right for support on a previous or inferior version of the software expires upon the installation of an upgrade or update.

8. Limited Warranty Arturia warrants that the disks on which the software is provided on is free from defects in materials and workmanship under normal use for a period of thirty (30) days from the date of purchase. Your receipt serves as evidence of the date of your purchase. Any implied warranties on the software are limited to thirty (30) days from the date of purchase. Some states do not allow limitations on duration of an implied warranty, so the above limitation may not apply to you. All programs and accompanying materials are provided 'as is' without warranty of any kind. The complete risk as to the quality and performance of the programs is with you. Should the program prove defective, you assume the entire cost of all necessary servicing, repair or correction.

9. Remedies Arturia's entire liability and your exclusive remedy shall be at Arturia's option either: (a) return of the purchase price, or (b) replacement of the disk that does not meet the Limited Warranty and which is returned to Arturia with a copy of your receipt. This limited Warranty becomes void if failure of the software has resulted from an accident, abuse, modification, or misapplication. Any replacement software will be warranted for the remainder of the original warranty period or thirty (30) days, or whichever option is longer.

10. No Other Warranties The above warranties are in lieu of all other warranties, expressed or implied, including but not limited to the implied warranties of the commercial value and fitness for a particular purpose. No oral or written information or advice given by Arturia, its dealers, distributors, agents or employees shall create a warranty or in any way increase the scope of this limited warranty.

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