

**USER MANUAL**

**\_TAPE MELLO-FI**

**ARTURIA**

**\_The sound explorers**

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## Special Messages

This manual covers how to use Tape MELLO-FI, 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.

# Introduction

## **Congratulations on your purchase of Tape MELLO-FI.**

Thank you for purchasing Tape MELLO-FI, an audio effect plug-in crafted to give you an intuitive and inspiring musical journey and based on the sound of the legendary Mellotron tape-playback keyboard instrument.

Excellence is placed at the heart of every Arturia product, and Tape MELLO-FI is no exception. Explore the presets, tweak a few controls, get lost in the features - dive as deeply as you like.

Be sure to visit the [www.arturia.com](http://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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## 1. WELCOME TO TAPE MELLO-FI!

Thank you for purchasing **Tape MELLO-FI**. Arturia has developed some of the most respected and innovative synthesizers, MIDI controllers, virtual instruments, and effects in the world.

**Tape MELLO-FI** is a powerful lo-fi effect plug-in derived from our Mellotron V software instrument. It allows you to impart the unique sonic character of a vintage Mellotron to any audio track in a recording project. Exceedingly simple to use, it provides instantly audible results and can be just the thing to make a track stand out and cause your listeners to wonder how you got “that” sound.

Essentially, Tape MELLO-FI makes any audio track sound like it is being played from vintage analog tape. (Note that Tape MELLO-FI is not a virtual instrument itself. You’ll want [Mellotron V](#) for that.)

### 1.1. What Is a Mellotron?



*Credit: Wikimedia Commons*

Invented by Hal Chamberlin, the Mellotron was essentially the original sampler. Instead of recording sounds into digital memory – which didn’t exist in any practical form in the 1960s – it used analog tape. The idea was to let musicians play recorded sounds of real instruments like strings and brass using an organ-like keyboard.



*Credit: Museum of Making Music via Wikimedia Commons*

Inside the Mellotron was a rack of tapes – one for each note. Pressing a key did two things: It squeezed the tape between a capstan and pinch roller so that it would move and pressed a play head onto the tape so that sound would be heard. The tapes were not loops. Instead, there was enough tape for approximately eight seconds of sound before you had to lift the key, triggering an auto-rewind mechanism for that note.

Models date back to 1959 and were originally intended as an alternative to the home organ, with features like entire band accompaniment tracks playable from the left of two side-by-side keyboards.



*Credit: Museum of Making Music via  
Wikimedia Commons*

The most popular model was the M400, which was released in the late 1960s and portable enough for some bands to take on the road. It featured three-track tapes; a knob moved the play heads to different tracks so the player could select different instrument sounds. If you wanted more sounds, you had to change out the entire tape bank!

Still, the Mellotron was the first instrument that let the keyboard player sound like an orchestra, and can be heard in the hands of artists such as the Moody Blues and, of course, for the iconic flute intro on "Strawberry Fields" by The Beatles.

## 1.2. Why Is the Mellotron Lo-Fi?

Tape degrades over time even under the best usage conditions. When you're repeatedly hammering it with play heads and shuttling it back and forth between play and rewind phases, that's a lot more wear and tear than just listening to an album on tape at home.

Plus, no mechanical playback system is perfect, let alone a vintage one amplifying the sound with vintage electronics.

These things contributed to the Mellotron having a signature sound, which became more pronounced with age and wear. So many aspects of musical equipment were once considered imperfections but are now sought-after: the quirks of a B-3 organ, the way vacuum tubes distort when driven hard, the 8-bit sampler sound, and the character of Mellotron tapes.

**Tape MELLO-FI** lets you dial in as much or as little of this character as you want, using a simple yet powerful set of controls.

### 1.3. Tape MELLO-FI Features

Tape MELLO-FI faithfully duplicates all of the variables that make the Mellotron M400 unique, and then some.



- Adjustable Drive (tape saturation) with Boost mode for extra overdrive.
- Tone control models original Mellotron circuitry.
- Automatic gain compensation so using Drive does not cause clipping in your tracks.
- Tone control duplicates EQ curve of Mellotron circuitry.
- Variable wow and flutter to model imperfections in Mellotron motor speed.
- Adjustable tape wear (degradation) from subtle to extreme.
- Adjustable mechanical noise of Mellotron flywheel.
- Adjustable tape noise (hiss).
- Tape Stop slows down speed and pitch of sound, with variable catch-up behavior.
- Variable Tape Stop speed
- Output gain control.
- One-knob lowpass/highpass filter for additional tone sculpting.
- Stereo width control to widen stereo picture.
- Variable tape catch-up to recover from Tape Stop.

And now, let's get started with Tape MELLO-FI!

## 2. ACTIVATION AND FIRST START

### 2.1. Compatibility

Tape MELLO-FI works on computers and laptops equipped with Windows 8.1 or later, or macOS 10.13 or later. It is compatible with the new current generation of Apple M1 processors. You can use it as an Audio Units, AAX, VST2, or VST3 plug-in within your favorite recording software. Tape MELLO-FI is a plug-in only and has no stand-alone mode.



### 2.2. Download and Install

You can download Tape MELLO-FI 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 MELLO-FI, the next step is to register the software. This is a simple process that involves a different software program, the Arturia Software Center.

#### 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 the 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 instructions, proceed to 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 MELLO-FI).

It's as simple as that!

## 2.3. Working with Plug-ins

Tape MELLO-FI can be used in all major digital audio workstation (DAW) programs including Cubase, Digital Performer, Live, Logic, Pro Tools, 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 MELLO-FI is a plug-in only, these settings 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, active outputs, sample rate, MIDI ports, project tempo, buffer size, etc.

In general, larger buffer sizes mean a lower CPU load as the computer has fewer interruptions and longer amount of time to process commands. However, this can result in longer latency if, for example, recording a new track while listening to playback with Tape MELLO-FI active. On the contrary, a smaller buffer means lower latency but higher CPU load. That said, Tape MELLO-FI goes pretty easy on your CPU, so a fast, current computer should easily be able to operate it – even on many tracks at once – with low buffer sizes. Of course, this all depends on whatever else is in the project.

Now that you've set up your software, it's time to play!

## 3. OVERVIEW

This chapter will provide an overview of the main control areas of Tape MELLO-FI, as well as cover behaviors that are consistent throughout the plug-in.

### 3.1. The User Interface

Here is a breakdown of the major control areas in the Tape MELLO-FI window.



Number	Area	Description
1.	<a href="#">Main Menu</a> [p.10]	Access functions such as saving and importing presets, adjusting the window size, and in-app tutorials.
2.	<a href="#">Preset Browser</a> and <a href="#">Name Pane</a> [p.13]	Displays current preset name, steps through presets, and opens the Preset Browser.
3.	<a href="#">Main Control Panel</a> [p.22]	The main controls governing the sound of Tape MELLO-FI.
4.	<a href="#">Lower Toolbar</a> [p.29]	Displays tool tips and additional controls including action history and Panic.



The operation of each of these areas is covered in upcoming chapters.

### 3.2. Stereo and Dual Mono Modes

Tape MELLO-FI always provides two-channel output, and you can put instances of it on an audio track in two ways:

- **Stereo:** Ideal for processing both sides in the same way.
- **Dual Mono:** Ideal for processing either side independently.

### 3.3. Common Behaviors

Many aspects of the Tape MELLO-FI interface work the same throughout the plug-in, for consistent operation.

#### 3.3.1. Value Pop-Ups



Also called tool tips, these pop-ups appear when you adjust a knob to show you the exact value in real time. They display a dB level for the **Output Gain**, **Noise**, and **Mechanics** knobs and a percentage for others.

#### 3.3.2. Double-Click for Default

Double-click any knob to return it to its default setting. This is always the setting that has the least (or no) effect on the sound. Output gain defaults to 0dB, i.e. no boost or cut relative to the input level from your track.

#### 3.3.3. Right-Click for Fine Adjustment

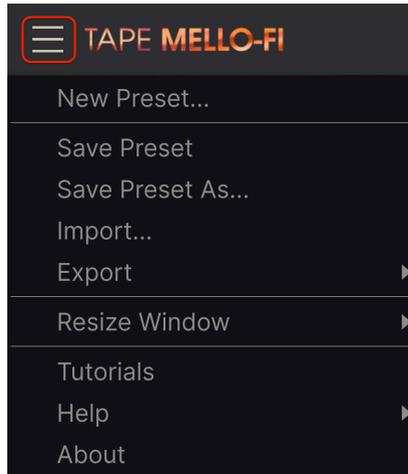
Right-click or control-click on a knob to be able to move it more slowly for fine adjustments.

#### 3.3.4. Control Descriptions



Mouse over or adjust any control, and the lower left corner of the window will display a brief description of what that control is and what it does.

## 4. MAIN MENU



Clicking the “hamburger” icon (three horizontal lines) in the top left corner opens a drop-down menu that lets you access several important features. Let’s look at them one at a time.

### 4.1. Preset Functions

Tape MELLO-FI can store and recall Presets that save all its settings. To get different sounds, you can quickly select them right inside the interface, as well as save a Preset if you happen upon some control settings you like. In turn, everything is saved with your DAW project.

#### 4.1.1. New Preset

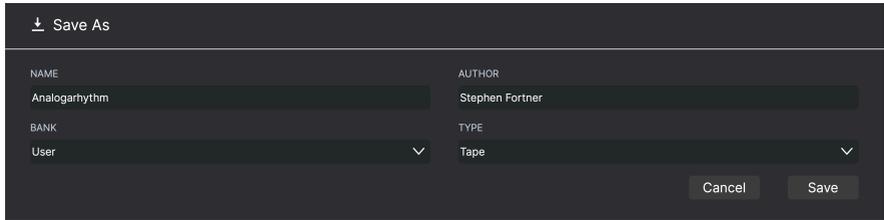
Creates a new preset with default settings for all parameters.

#### 4.1.2. Save Preset

Overwrites the current preset with any changes you have made. This applies only to user Presets, so the option is greyed out for factory Presets.

### 4.1.3. Save Preset As

Saves the current state of Tape MELLO-FI under a different Preset name. Clicking this option reveals a window where you can name your Preset and enter more detailed information about it:



NAME	AUTHOR
Analogarhythm	Stephen Fortner
BANK	TYPE
User	Tape

Cancel Save

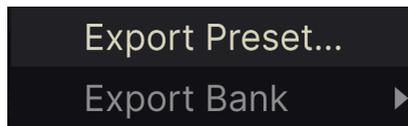
 The Bank, Author, and Type fields are all useful when searching for presets in the [Preset Browser](#) [p.13].

### 4.1.4. Import

This command lets you import a Preset file or entire bank stored on your computer. It opens an OS-level navigation box to find the proper files. Tape MELLO-FI Presets and banks both use the file extension **.mix**.

### 4.1.5. 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 allows you to specify where to save the file(s).



- **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 sounds from the plug-in, which is useful for backing up or sharing presets. Saved banks can be reloaded using the **Import** menu option.

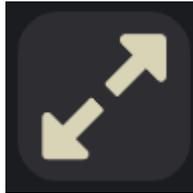
## 4.2. Resize Window

Tape MELLO-FI can be resized from 50% to 200% of its default size (100%) without any visual artifacts. 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.

This operation can also be performed using keyboard shortcuts. On Mac, use Command +/- to resize the window. On Windows, use Control +/-.

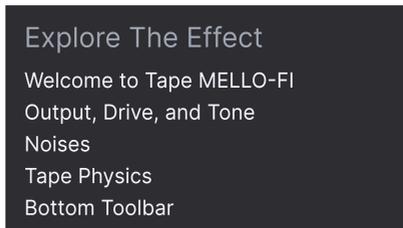
### 4.2.1. Maximize View Button

If you resize the Tape MELLO-FI window larger and some of its parameters are pushed outside the viewable range of your computer display, you may see this icon in the far lower right corner of the window:



Click it, and the window will resize and re-center to optimize your available screen space.

### 4.2.2. Tutorials



Tape MELLO-FI comes with interactive tutorials that walk you through different features of the plug-in. Clicking this option opens a pane on the right side of the window where the tutorials appear. Select one to access step-by-step descriptions that highlight the relevant controls and walk you through the process.

### 4.2.3. 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.

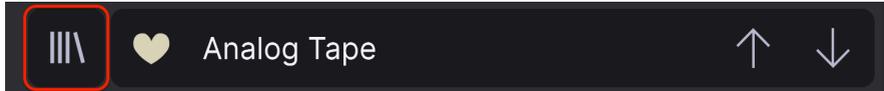
### 4.2.4. About

Here you can view the software version and developer credits. Click again anywhere on the screen to make this pop-up window disappear.

## 5. SELECTING PRESETS

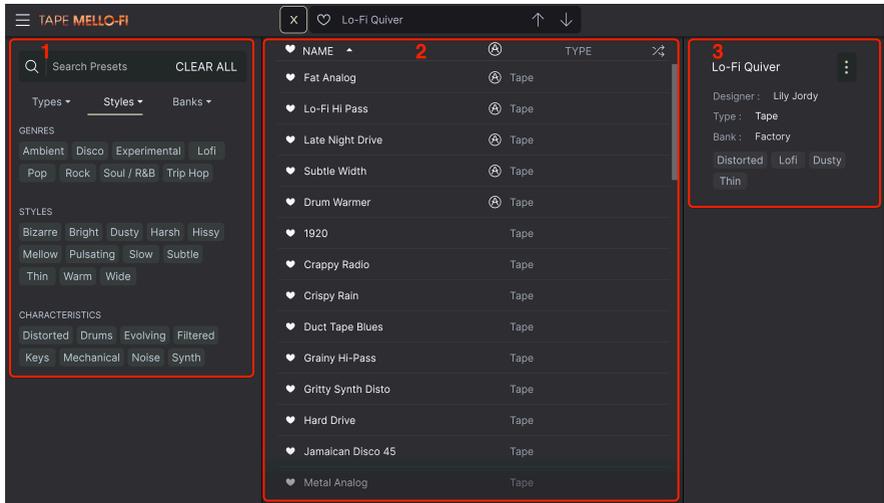
Tape MELLO-FI lets you browse, search, and select Presets from a browser-like interface inside the plug-in. You can also create and save your own Presets in the User Bank. Of course, the state of any instance of the plug-in – including the current Preset – is automatically saved when you save your DAW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

### 5.1. The Preset Browser



Click the “books on a shelf” icon to access the Preset Browser.

The three main areas of the Preset Browser are as follows:

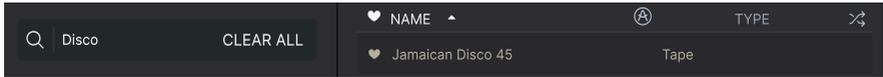


Number	Area	Description
1.	<a href="#">Search [p.14]</a>	Searches for Presets by text entry with filters for Type, Style, and Bank.
2.	<a href="#">Results Pane [p.16]</a>	Displays search results, or all Presets if no search criteria are active.
3.	<a href="#">Preset Info [p.18]</a>	Displays Preset Details; can edit details for Presets in User Bank.

## 5.2. 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 \[p.14\]](#) 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.



*Filter by typing text in the Search field*

### 5.2.1. 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.

#### 5.2.1.1. Types

Types are categories of audio effects: tape, distortion, EQ, modulation, and so on. With a clear search bar, click the **Types** drop-down to bring up a list of types. Types sometimes include sub-types (especially in more complex Arturia effect plug-ins) but Tape MELLO-FI is relatively simple, so "Tape" is the type you will see most often.

Click any one of them, and the results will show only Presets that match that tag. You can also select multiple Types using command-click (macOS) or ctrl-click (Windows). For example, if you aren't sure whether the preset you're looking for was tagged with Keys or Pad, select both to broaden the search.

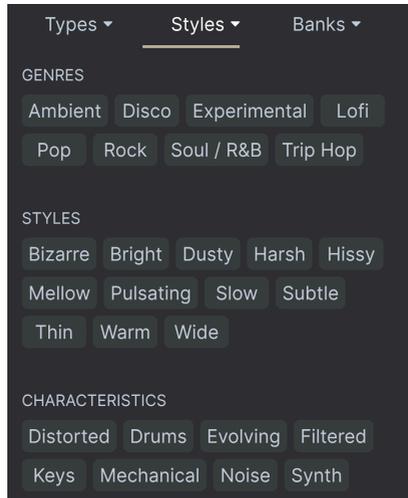
Results columns can be inverted by clicking the arrow buttons to the right of their titles (Name, Type, Designer).



♪ You can specify the type when [saving a preset \[p.11\]](#). That Preset will then show up in searches where you've selected that Type.

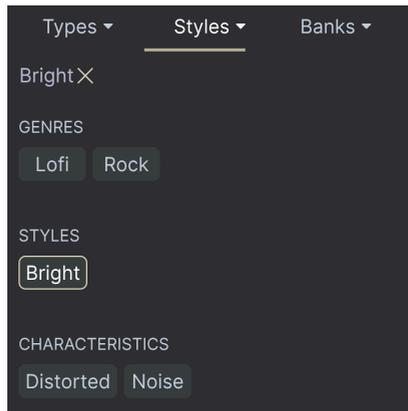
### 5.2.1.2. Styles

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



- *Genres*: Identifiable musical genres such as Ambient, Disco, Experimental, etc.
- *Styles*: General “vibe” such as Bizarre, Mellow, Pulsating, etc.
- *Characteristics*: Further sonic attributes such as Distorted, Evolving, etc.

Notice that when you select any tag, several other tags usually disappear.



This is because the browser is narrowing your search by a process of elimination. 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.

### 5.2.2. Banks

Next to the **Types** and **Styles** drop-down is the **Banks** drop-down, which lets you do your search (using all the methods above) within the factory or user Banks.

## 5.3. 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.

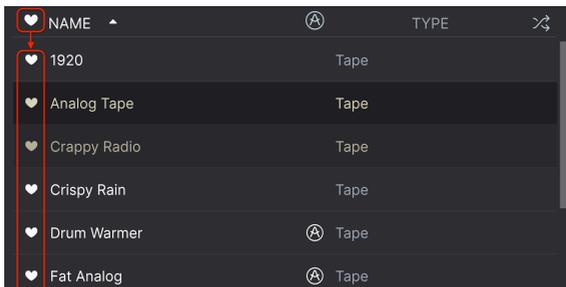
### 5.3.1. Sorting Presets

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.

### 5.3.2. Liking Presets

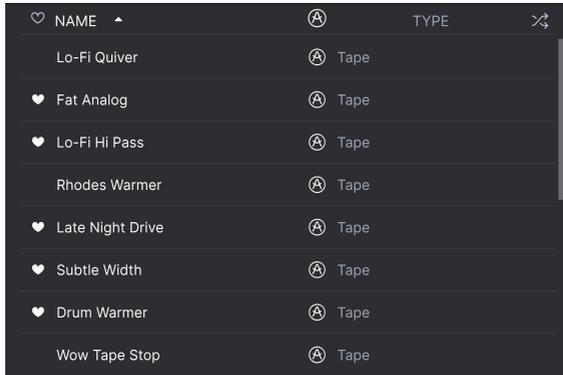
As you explore and create presets you can mark them as Liked by clicking the heart next to their names. (This icon also appears in the main [Preset Name Pane \[p.21\]](#) Clicking on the heart icon makes all of your liked Preset show up at the top of the results list, as shown here:



A filled-in heart icon indicates a like. An outline only 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.

### 5.3.3. Featured Factory Presets

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



NAME	TYPE
Lo-Fi Quilver	Tape
Fat Analog	Tape
Lo-Fi Hi Pass	Tape
Rhodes Warmer	Tape
Late Night Drive	Tape
Subtle Width	Tape
Drum Warmer	Tape
Wow Tape Stop	Tape

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

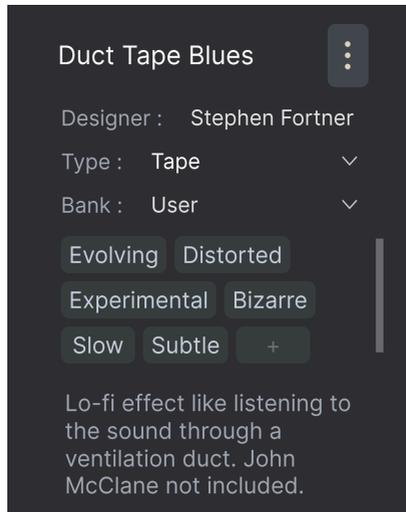
### 5.3.4. Shuffle Button



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.

## 5.4. Preset Info Section

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



For Presets in the User bank (as the result of a Save As operation), you can enter and edit the information 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 in the text fields, use one of the pull-down menus to change the Bank or Type, and click the + sign to add or delete Styles. You will see all the options come up in the Results Pane's space:



Notice that there are + signs at the end of the Styles, Genres, and Characteristics groups. That's right - you can make up your own and they will be usable as tags in future searches!

**i** Types and Styles changes you make here are reflected in searches. For example, if you remove the "Experimental" Style tag and then save that Preset, it will not show up in future searches for Experimental sounds.

### 5.4.1. Preset Info Quick Menu

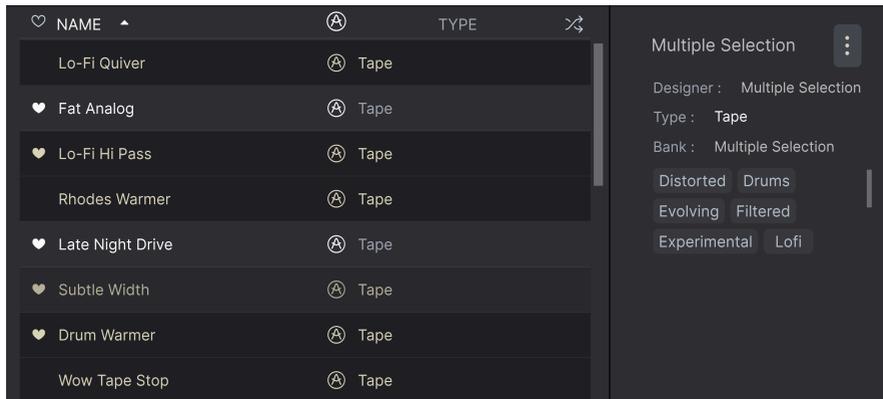
Clicking the icon with three vertical dots brings up a quick menu for Save, Save As, and Delete Preset Operations:



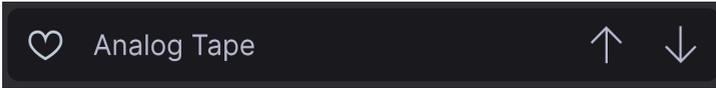
For sounds in the Factory Bank, only Save As is available.

## 5.4.2. 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 command (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.



## 5.5. Preset Name Pane



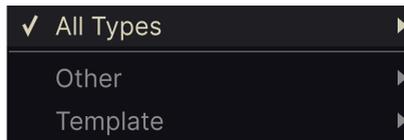
The name pane at top center is always displayed whether you're in the main controls view or the Preset Browser. It displays the name of the current Preset, obviously, but also offers further ways to browse and load Presets.

### 5.5.1. 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.

### 5.5.2. Drop-Down Browser

Click on the Preset name in the center of the upper tool bar to bring up a drop-down menu. The first option in this menu is called All Types, and it brings up a submenu of literally every Preset in the current bank.



*Filter results may differ based on Search criteria*

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

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

## 6. MAIN CONTROL PANEL

This is where the fun happens. The main panel area is home to all the knobs and buttons that control the sound of Tape MELLO-FI. We can think of it in terms of four areas:



Number	Area	Description
1.	<a href="#">Preamp [p.22]</a>	Drive, Tone, and Noise controls plus VU meter.
2.	<a href="#">Tape [p.25]</a>	Controls that affect the characteristics of the modeled analog tape.
3.	<a href="#">Tape Stop [p.26]</a>	Feature to slow down "tape" playback and Mellotron Flywheel animation.
4.	<a href="#">Output [p.28]</a>	Output volume, lowpass/highpass filter, and bypass controls.

### 6.1. Preamp Section

This section of the interface includes a Drive circuit to simulate tape saturation or more aggressive overdrive,, a Tone control, and a Noise knob to add authentic analog tape hiss to the sound.



### 6.1.1. Drive

A desirable characteristic of analog tape is *saturation*, which refers to a sometimes pleasing sort of harmonic distortion that occurs when signal is recorded to tape at high levels. The magnetic particles on the tape are working to their maximum to represent that signal, so they're *saturated*. Turning up the Drive knob increases the saturation.

#### 6.1.1.1. Boost Button

Directly under the Drive knob is a button that, when lit, boosts the signal going into the Drive circuit by 11 dB. This can take the sound beyond tape saturation into something more like running a Mellotron through a vintage tube guitar amp and cranking it up.

#### 6.1.1.2. Automatic Gain Compensation

Regardless of the Drive setting and whether the Boost button is engaged, Tape MELLO-FI applies automatic gain compensation to the signal. This means that even at extreme Drive settings, the output signal won't be any louder in your DAW track. In other words, you get the effects of saturation and overdrive that you want without the clipping of your audio track that you don't.

### 6.1.2. Tone

The Tone control circuit in Tape MELLO-FI is a kind of EQ modeled on the characteristics of the Mellotron M400 circuitry. Turning it down pretty much sounds like it's rolling off treble frequencies, but it's actually more sophisticated. Turning the knob clockwise moves a bandpass filter slightly up the frequency spectrum and imparts a slight increase to the resonance. This is all subtle, but it's there.



Turning the knob counter-clockwise from its highest setting will simulate the character of well-played Mellotron tapes that have lost some of their sparkle.

#### 6.1.2.1. Tone Button

The button directly below the **Tone** knob simply engages or bypasses the Tone circuit, since you may wish to enjoy other aspects of the plug-in's effect on your sound with or without it.

### 6.1.3. Noise

All analog tape has a certain amount of hiss, and traditionally – whether you had a Mellotron or a cassette deck in your home hi-fi setup – less is better. But this wouldn't be an Arturia plug-in if we didn't let you dial in exactly as much vintage imperfection as you like. The **Noise** knob adds tape hiss to the sound.



Noise is added to the signal upstream of the Tone circuit, so that the **Tone** knob affects the frequency response of the hiss along with the audio signal.

#### 6.1.4. VU Meter



The VU meter in Tape MELLO-FI is more than eye candy. It displays the input gain as measured directly after the Drive control, as the Drive control can increase the gain of the Preamp section.

## 6.2. Tape Section

Here is where you will find controls related to the physics of analog tape and the Mellotron mechanism playing it back. You can alter your sound in subtle or extreme ways in this section.



### 6.2.1. Wow and Flutter

We describe these two knobs together because the phenomenon they simulate has the same cause: Mechanical systems that play back audio by moving a physical medium like tape or a vinyl record are inherently flawed. In the Mellotron's case, that flaw was variations in tape speed, which turned into pitch variation.

- **Flutter:** Adjusts faster pitch variation. Where Wow is more of a slow "seasick" sound, Flutter is closer to a badly behaved vibrato. It was caused by the electric motor in a Mellotron or any kind of tape player rotating at an inconsistent speed.
- **Wow:** Adjusts slower pitch variation. In the analog world, this was commonly caused by degradation of the wheels, capstan, and/or pinch roller that were all supposed to maintain correct tape speed.



♪ Start by experimenting with small amounts of these, which can add authentic depth to the sound.

### 6.2.2. Wear

Here's another thing about mechanical playback: Something (the medium) has to touch something else (whatever is reading the medium). That means friction, which means wear. In a Mellotron, as tapes repeatedly passed over play heads, the magnetic particles on them gradually got rubbed off. This knob simulates everything from a slight amount of that wear to the tape being about to fall apart. What you hear includes pitch randomness and distortion.

### 6.2.3. Mechanics

The Mellotron used a heavy flywheel driven by an electric motor. The momentum of the flywheel ensured that as soon as you pressed a key, the tape would play at the proper speed and therefore the correct pitch. This also made a certain amount of noise, which the **Mechanics** knob lets you dial in to taste.

## 6.3. Tape Stop

This may be the most fun thing to do in Tape MELLO-FI. In this section you can slow down or stop the “tape” entirely – even with your DAW playback still running! The effect is like turning off the motors with the amp electronics still live, or slowing down a turntable. Speed and pitch change together.



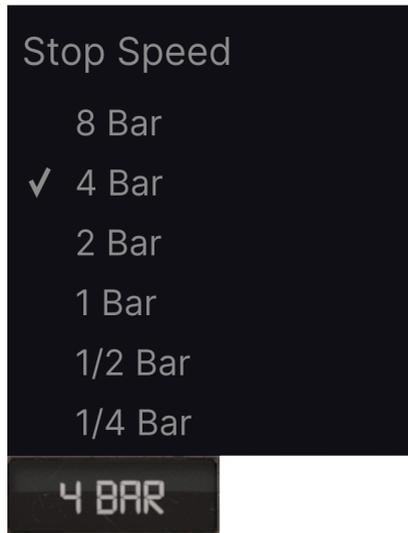
### 6.3.1. Flywheel

The animated flywheel represents the one inside a Mellotron. Click and hold on it, and you will hear the speed and pitch of your track slow down. Hold, long enough, and it will slow down to nothing. Release the mouse button and the sound will come back up to speed.

### 6.3.2. Tape Stop Button

The button with the Pause and Play icons lets you slow down the “tape” in latched fashion, i.e. without holding the mouse button. Click it once to begin slowdown, and again to come back up to normal speed.

### 6.3.3. Stop Speed Menu



Clicking this button brings up a drop-down menu where you can select how long it takes for Tape Stop to slow down the speed and pitch to silence. A bar equals one musical bar in your DAW project, and the Tape Stop function is always locked to your DAW project tempo.



How long it takes for the sound to come back to normal speed once you release Tape Stop is determined by the [Tape Catch-up \[p.29\]](#) setting, covered in the next chapter.

## 6.4. Output Section

The final settings governing the output of Tape MELLO-FI back into your track are found here.



### 6.4.1. Bypass Switch

The large On/Off toggle switch bypasses Tape MELLO-FI so that it has no effect on your sound. Your DAW plug-in window may also have its own bypass control.

### 6.4.2. Output

This knob simply controls the output level of Tape MELLO-FI back into the track on which it is inserted. Its default setting is 0dB or “unity gain,” which means that there is no increase or decrease in the level. The range of the knob is from -70 to +10dB.

**i** The **Output** knob *will* affect the level of your DAW track, as it is downstream of all other controls and the automatic gain compensation.

### 6.4.3. Filter

Tape MELLO-FI includes a one-knob filter that functions in either lowpass or highpass mode. The knob sweeps the cutoff frequency. Counter-clockwise from 12 o'clock, it is a lowpass filter. Clockwise from there, it's highpass. No filtering is applied when the knob is exactly at 12 o'clock.

**i** The filter is at the end of the signal chain, just before the **Output** knob. Thus, all other aspects and sounds of Tape MELLO-FI pass through it. For the curious, the filter has a 12 dB per octave rolloff slope and a cutoff frequency range from 70Hz (lowpass) to 10kHz (highpass).

## 7. THE LOWER TOOLBAR

A number of utility functions reside in the very bottom of the Tape MELLO-FI interface. They're like a good mechanic or plumber: maybe not glamorous, but you're really glad to have them when you need them.

Since this area is skinny and not amenable to covering in numbers and diagrams, we will just take them from left to right.

### 7.1. Control Description Area

Output: Sets the output volume of the plugin

*Lower toolbar, left side*

The left half of the toolbar is where the [control descriptions \[p.9\]](#) appear, telling you what any knob, button, icon, or other control does when you mouse over it.

### 7.2. Stereo Width

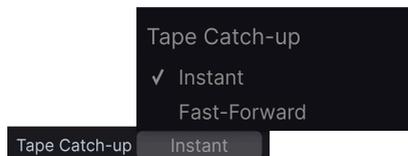


*Lower toolbar, right side*

Engaging this button imparts slight differences in the [Wow and Flutter \[p.25\]](#) settings between the left and right channels. This results in a wider stereo picture. Of course, this means you need to have a little Wow and/or Flutter dialed in to hear the difference.

### 7.3. Tape Catch-Up

Clicking this button brings up a drop-down that governs how quickly the “tape” recovers to normal speed once you have used, then released, the [Tape Stop \[p.26\]](#) function.



- **Instant:** Sound returns to normal speed immediately upon release.
- **Fast-Forward:** Sound returns to normal speed over a time interval.

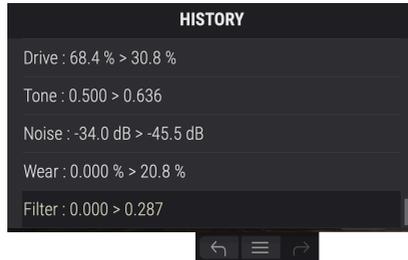
The Fast-Forward setting is so called because the tape first sounds like it has been sped up, then returns to normal speed. The time it takes for the sound to return to normal is relative to the time set in the [Stop Speed Menu \[p.27\]](#) – approximately but not exactly half.

### 7.4. Bypass

This button bypasses the plug-in, duplicating the function of the large On/Off toggle on the main control panel.

## 7.5. Undo, Redo, and History

When editing a plug-in, it's all too easy to overshoot a sweet spot and then wonder how to get back to where you were. Like all Arturia plug-ins, Tape MELLO-FI offers comprehensive Undo, Redo, and History so that you always have a trail of "bread crumbs."



### 7.5.1. 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.

### 7.5.2. 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.

### 7.5.3. History

Click the center button with three lines to open the History window, as shown above. This provides a step-by-step account of every move you have made in Tape MELLO-FI. 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.

### 7.5.4. CPU Meter

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

### 7.5.5. Panic

Mouse over the CPU Meter, and it will display the word PANIC. Click to send an all-sounds-off command. 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 going nuts in a feedback loop), stop your DAW playback and disable the offending plug-in.



🎵 The very far lower right of the toolbar is also where the [Maximize View \[p.12\]](#) will appear if it is needed.

## 7.6. Have Fun!

As we said in the beginning, Tape MELLO-FI is a simple but powerful plug-in, letting you do a lot to the sound using just a few controls. This wraps it up for describing what all the controls do, so we just want to say we hope you have fun and create compelling new music with it!

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