USER MANUAL

# \_CP-70 V



# DIRECTION

Frédéric Brun

DEVELOPMENT			
Pierre-Lin Laneyrie	Cyril Lepinette	Pauline Alexandre	Mauro De Bari
Baptiste Aubry	Patrick Perea	Goncalo Bernardo	Geoffrey Gormond
Mathieu Nocenti	Stéphane Albanese	Samuel Limier	Marius Lasfargue
Raynald Dantigny	Pascal Douillard	Fanny Roche	Marc Antigny
Corentin Comte	Christophe Luong	Rasmus Kürstein	Loris De Marco
Marie Pauli	Pierre Mazurier	Kevin Arcas	
Alexandre Adam	Fabien Meyrat	Alessandro De Cecco	
Yann Burrer	Samuel Lemaire	Hugo Caracalla	
DESIGN			
Edouard Madeuf	Maxence Berthiot	Morgan Perrier	
Callum Magill	Florian Rameau	Heloise Noir	
Pierre Pfister	Shaun Ellwood	Cédric Coudyser	
SOUND DESIGN			
Jean-Michel Blanchet	Quentin Feuillard	Jerry Kovarsky	
Maxime Audfray	Lily Jordy	Josh Fielstra	
Florian Marin	Jonathan Adams Leonard	Dennis Hamm	
QUALITY ASSURANC	CE		
Germain Marzin	Julien Viannenc	Enrique Vela	Arthur Peytard
Arnaud Barbier	Roger Schumann	Benjamin Renard	
Matthieu Bosshardt	Adrien Soyer	Nicolas Stermann	
Aurélien Mortha	Bastien Hervieux	Nicolas Naudin	
USER MANUAL			
Stephen Fortner (writer)	Jimmy Michon		
BETA TESTING			
Marco Koshdukai Correia	Chuck Capsis	Kevin Dumas	Mat Herbert
Chuck Zwicky	Jay Janssen	Davide Puxeddu	James Lovie

T.J. Trifeletti

Gary Morgan

Chuck Zwicky

Andrew Macaulay

Jeff Cecil

**Richard Courtel** 

Ken Flux Pierce

Apollo Negri

Terry Marsden

Rodrigues

Fernando Manuel

Gustavo Bravetti

Terry Marsden

ARTURIA SA - 2023 - All rights reserved.
 26 avenue Jean Kuntzmann
 38330 Montbonnot-Saint-Martin
 FRANCE
 www.arturia.com

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# Thank you for purchasing CP-70 V!

This manual covers the features and operation of Arturia's **CP-70 V**, which we believe to be the best emulation of the classic CP-70 electric grand piano available today.

**Be sure to register your software as soon as possible!** When you purchased CP-70 V, you were sent a serial number and an unlock code by e-mail. These are required during the online registration process.

# Special Messages

#### Specifications Subject to Change:

The information contained in this manual is believed to be correct at the time of printing. However, Arturia reserves the right to change or modify any of the specifications without notice or obligation to update the hardware or software that has been purchased.

### 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 level or at a level that is uncomfortable.

If you encounter any hearing loss or ringing in the ears, you should consult an audiologist.

#### EPILEPSY WARNING - please read before using CP-70 V

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.

# Introduction

#### Congratulations on your purchase of Arturia CP-70 V!

As with all of our products, we believe in offering the best of both worlds in a single package and letting you choose how you want to use it. You can choose to focus on the hardwarelike Main Panel and have an improved vintage hardware-like experience, or explore the Advanced Panel and discover sonic and performance possibilities that go well beyond the original electric piano's capabilities.

Here's to a blissful blend of the old and the new - and the beautiful music you'll make with it!

Peace, love, and music,

#### The Arturia team

Be sure to visit the www.arturia.com website for information about all of our other great hardware and software instruments. They have become indispensable, inspiring tools for musicians around the world.

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# 1. WELCOME TO CP-70 V!



Arturia thanks you for purchasing CP-70 V. It is an accurate and detailed sampled virtual instrument based on the Yamaha CP-70 electric grand piano, a staple of keyboard rigs in touring bands from the mid-1970s through the 1980s. We are confident it will be an invaluable addition to your music production tool kit.

If you've purchased our products before, you know we take great pride in recreating the sound and feel of the original instruments. Then, we top it off with 21st-century features not imaginable in the era of the originals, giving new life to vintage sounds in a modern music production environment.



# 1.1. What is an electric grand piano?

Yamaha CP7O electric grand piano

An electric grand is a type of *electro-acoustic* piano. This refers to a piano that, like a conventional acoustic piano, uses physical strings struck with hammers as the tone source. Instead amplifying the sound via a wooden soundboard, an electro-acoustic piano uses magnetic pickups, which are then amplified electrically. Simply put, the instrument is the piano's answer to the electric guitar.

Companies built electro-acoustic pianos to satisfy touring musicians' need for genuine piano sound onstage, only in a more portable package. "Portable" is a relative term here, seeing as the CP-70 weighed approximately 300 pounds. That is on par with the very smallest and lightest acoustic upright pianos. What's more, the CP-70 (and it's 88-key big brother, the CP-80) separated into two pieces for transport: the harp containing the strings, and the lower body containing the keyboard and action. Another benefit was that, like an electric guitar, the piano plugged directly into an amplifier or P.A. system. By contrast, an acoustic piano in the context of a rock band needed to be miked, and microphones could pick up nearby loud instruments such as drums and guitar.

In its time, the CP series was arguably as close as you could get to "real" piano sound in a live band, unless you had the resources to transport, tune, and mike an acoustic piano show after show. The bass range is less harmonically rich than an acoustic piano, with an almost bass-guitar-like tone that has since become one of the CP's sonic signatures. Overall, the piano also had a slightly "metallic" character that lent itself well to rock, pop, prog, and new wave music as the late 1970s morphed into the '80s.

## 1.1.1. Electric vs. electro-acoustic

Technically, electro-acoustic pianos are a subset of *electric* pianos, which are simply any instruments that apply electrical amplification to a vibrating tone source. However, when keyboard players say "electric piano," they are usually referring to an instrument that uses a tone source other than strings, *e.g.*, tines or reeds. "Electric grand" or "electric upright" are the more common terms for string-based electro-acoustic pianos like the CP-70. Grands orient the strings horizontally, uprights vertically.

# 1.2. Other electro-acoustic pianos

With their signature trapezoid shapes, Yamaha electric grands are certainly the most popular and recognizable instruments of this kind. But they were neither the first nor the only ones.

The Neo-Bechstein was introduced in 1929 and is acknowledged to be the first electroacoustic piano to be commercially available. Its chief selling point was reduced cost for homes and schools.



1929's Neo-Bechstein, the first electro-acoustic piano. Photo by Karl Kunde, Technisches Museum Wien.

The Storytone was the product of collaboration between piano builder Story & Clark and radio manufacturer RCA. It made its debut at the 1939 World's Fair, with head-turning art deco design by RCA's John Vassos. Storytone pianos in good condition are still found on the collectibles market and can command prices upwards of US\$20,000.



The Storytone electro-acoustic piano. Image via Wikimedia Commons.

The most direct competitor to the CP series was the Kawai EP-308, which had a horizontal grand form factor. Kawai also manufactured the EP-608 electric upright, which competed with Yamaha's CP-60 model.



The Kawai EP308 electric grand.

Even the most brief overview of electro-acoustic pianos would be incomplete without the Helpinstill Roadmaster. These electric uprights came in 88-key and 64-key models, and were notable because the pianos were their own road cases. After use, they folded up for safe transport without the need for a separate case. The Helpinstill company is still in business making pickup systems for amplifying acoustic pianos.



An 88-key Helpinstill Roadmaster. Image courtesy of Chicago Electric Piano Co.



Needless to say, actual CP-series pianos are heavy and require the attention and investment due a collectible instrument. While several electric grand sample libraries already exist, we wanted to create an integrated and polished virtual instrument to give you the full CP-70 experience. We believe CP-70 V is simply the best electric grand piano emulation available.

We began with detailed sampling sessions of a CP-70 in pristine condition, recording eight dynamic layers and accompanying releases. We recorded the piano both through its direct output and via a pair of high-end ribbon microphones, letting you blend direct and miked signals in the final output.

We then emulated the CP-7O's onboard preamp, EQ, and tremolo using circuit modeling. This technique accurately captures the behavior of the CP's electronics at the component level.

Finally, we add our Pedal Rig effects engine: four slots with a choice of 13 pedal-style effects each. Downstream of this are an amp simulator that models rotary and Twin cabinets, then a sophisticated convolution reverb to place your sound in realistic virtual acoustic spaces.

#### 1.3.1. CP-70 V feature summary

- 8 sampled velocity layers
- Adjustable key release sounds
- Original CP tremolo can be synced to tempo
- Circuit-modeled bass, middle, and treble EQ
- Mixable direct and stereo-miked samples
- Envelope attack and release settings for creative sound design
- Four pedal effects slots with 13 virtual "stomp boxes" each
- Amp simulator models rotary speaker and Twin guitar amp with all relevant parameters
- Room simulator is a high-quality convolution reverb featuring nine acoustic spaces
- Controls may be fully MIDI-learned for assignment to physical knobs and sliders on a controller keyboard
- Macros can adjust multiple parameters via a single knob twist
- Editable velocity curves with recallable presets
- Stand-alone and plug-in operation in all major formats
- Factory Presets by top sound designers

# 1.4. Great CP electric grand songs

Here is a quick guide to a handful of famous recordings using the CP-70 or CP-80 electric grands. It is by no means complete or definitive, as that would take up far more space than we have here.

Artist	Song Title(s)
The Buggles	Video Killed the Radio Star
Elvis Costello	Every Day I Write the Book
Peter Gabriel	In Your Eyes
Genesis	Turn It On Again
Hall & Oates	Kiss On My List
Joe Jackson	Steppin' Out
Elton John	Two Rooms at the End of the World
Keane	Somewhere Only We Know
Simple Minds	All the Things She Said
Spyro Gyra	Schu's Blues (live)
Klaus Schulze	Angst
Tangerine Dream	Quichotte Part 1
Toto	Hold the Line
U2	Sweetest Thing
Frank Zappa	City of Tiny Lights (live)

Explore other songs by these artists as well. The CP is especially prominent in much of Peter Gabriel's work, for example.

# 2. ACTIVATION AND FIRST START

# 2.1. Register, Activate, and Install CP-70 V

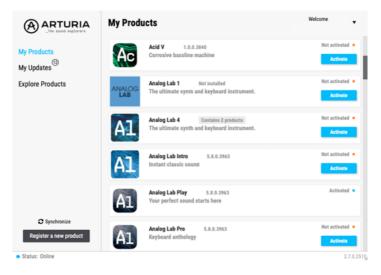
CP-70 V works on computers equipped with Windows 10 or later and macOS 11 or later. You can use it as a standalone version or as a plug-in for your favorite DAW (Digital Audio Workstation) in Audio Units, AAX, VST2, or VST3 format.



Before you install or register the software, you'll need to create a My Arturia account here, using an email address and password of your choice: <a href="https://www.arturia.com/createanaccount/">https://www.arturia.com/createanaccount/</a>

While it's possible to handle registration, activation, and other tasks manually online, it's far simpler to download and use the Arturia Software Center app, which can be found here: https://www.arturia.com/support/downloads&manuals

You'll enter your email address and password to set up Arturia Software Center, which acts as a central location for all of your Arturia software registrations and activations. It also helps you install and update your software by keeping tabs on current versions.



The Arturia Software Center

You can register, activate, and install your product inside Arturia Software Center by pressing the **Register a new product** button, and clicking the boxes to **Activate** and then **Install** your software. The registration process will require you to enter the serial number and the unlock code you received when you bought your software.

You can also do this online by logging into your account and then following the instructions here: http://www.arturia.com/register

Once you've registered, activated, and installed CP-70 V, it's time to get it to talk to your computer.

# 2.2. Initial setup for stand-alone use

If you would like to use CP-70 V in standalone mode, you will need to ensure that its MIDI input/ouput and audio outputs are being routed properly to and from the software. You'll generally only need to do this once, unless you change your MIDI controller or audio/MIDI interface. The setup process is the same on both Windows and macOS.

I This section only applies to those of you who plan to use CP-70 V in stand-alone mode. If you are only going to use CP-70 V as a plug-in inside a host DAW or other music software, you can safely ignore this section – your host music software handles these settings.

#### 2.2.1. Audio and MIDI settings: Windows

At the top left of the CP-70 V application is a pull-down menu. It contains various setup options.



CP-70 V Main Menu

Click on **Audio Midi Settings** to open the following window. This works in the same way on both Windows and macOS, although the names of the devices available to you will depend on the hardware you are using. Remember, this option is only available (and needed) in the standalone version of CP-70 V.

Audio MIDI Settings			×
👸 Audio Setting	S	MIDI Settings	
Adjust the audio se	ettings to your setup.	Select the MIDI ports to use your controllers.	
Audio Driver	- Windows Audio	MIDI ports AF16Rig DIN 1 In	
Audio Device	- 1-2 [Spk/Phones L-R] (AF16Rig	AF16Rig Usb Host In	
	• T E [obv] House E I/] (HI Tord	MOTU M Series MIDI In	
Buffer size	<ul> <li>512 samples (11.6 ms)</li> </ul>		
Sample rate		Tempo 120.0 BPM - +	
Test Audio 🔌	Play		
		ОК	

Starting from the top, you have the following options:

- **Driver:** Selects which audio driver will handle playback of CP-70 V. This can be your computer's internal driver, a generic ASIO driver, or an external soundcard or interface driver. The name of your hardware interface(s) may appear in the field below, depending on your selection.
- Device Selects the audio hardware through which you will hear CP-70 V.
- **Output Channels** lets you select which of the available outputs will be used to route audio out. If you only have two outputs, this selection box will not be shown. If you have more than two, you can select a specific pair of outputs.
- The Buffer Size menu lets you select the size of the audio buffer your computer uses to calculate sound. The latency in milliseconds is displayed after the buffer size setting.

I A smaller buffer means lower latency, i.e. a shorter delay between pressing a key and hearing the note, but loads your CPU more heavily and can cause pops or clicks. A larger buffer means a lower CPU load, as the computer has more time to think, but can result in a noticeable delay between playing a note and hearing it. A fast, modern computer should easily be able to operate at a buffer size of 256 or even 128 samples without clicks If you still get clicks, enlarge the buffer size until they stop.

• The **Sample Rate** menu lets you set the sample rate at which audio is sent out of the instrument.

! The options here will depend on what your audio device can support; nearly every device can operate at 44.1 kHz or 48 kHz, which will be perfectly fine for most applications. If you have a specific need to use a higher sample rate, up to 96 kHz, CP-70 V will happily support that.

• The **Show Control Panel** button will jump to the system control panel for whatever audio device is selected.

- Test Tone sends a short test tone when you click the Play button, to help you
  troubleshoot audio issues. You can use this feature to confirm that the instrument
  is routed correctly through your audio interface and that audio is playing back
  where you expect to hear it (your speakers or headphones, for example).
- The MIDI Devices area will display any MIDI devices you have connected to your computer (if any). Click the check box to accept MIDI from the device(s) you want to use to control the instrument. You can select multiple MIDI devices at once with the checkboxes.

! In standalone mode, CP-70 V listens for all MIDI channels, so there's no need to specify a channel.

 Tempo sets a base tempo for features inside CP-70 V such as LFO and effects sync. When using CP-70 V as a plug-in, the instrument gets tempo information from your host software.

× Audio MIDI S	ettings				
Audio Settings Adjust the audio settings to your setup.		Select the MIDI po	•	ontrollers.	
Audio Driver Audio Device	<ul> <li>✓ CoreAudio</li> <li>✓ Universal Audio Thunderbolt</li> </ul>	MIDI ports	Minilab3	3 DIN THRU	
Output channels	MON L + R LINE 1 + 2 LINE 3 + 4	Tempo	120.0 BPM		
Buffer size Sample rate	<ul> <li>↓ 128 samples (2.9 ms)</li> <li>↓ 44100 Hz</li> </ul>				
Test Audio 📢	Play		(	ОК	

## 2.2.2. Audio and MIDI settings: macOS

Audio MIDI Settings for macOS

The menu for setting up audio and MIDI devices for macOS is accessed in the same way as for Windows, and the setup process is nearly identical. All options work the same way as described above in the Windows section. The only difference is that all macOS devices, including external audio interfaces, use the CoreAudio driver built into macOS to handle routing. In the second dropdown menu under **Device**, choose the audio device you wish to use.

#### 2.2.3. Using CP-70 V as a plug-in



CP-70 V's interface looks the same in plug-in mode as in standalone mode.

CP-70 V comes in VST2, VST3, Audio Unit (AU), and AAX plug-in formats, for use in all major DAW software such as Ableton Live, Cubase, Logic, Pro Tools, Studio One, and more.

When using CP-70 V as a plug-in, all audio and MIDI device settings are handled by your host music software. Please refer to your host music software's documentation if you have any questions about loading or using plug-ins.

Note that when you load CP-70 V as a plug-in instrument inside your host software, its interface and settings work the same way as in standalone mode (see below), with a few small differences:

- CP-70 V will synchronize to your DAW's host tempo/BPM when sync is required
- You can automate numerous parameters using your DAW's automation system
- You can use more than one instance of CP-70 V in a DAW project
- You can run the outputs of CP-70 V through any additional audio effects available to your DAW, such as delay, chorus, filters, etc.
- You can route CP-70 V's audio outputs creatively inside your DAW, using the DAW's own audio routing system.

# 2.3. Playing CP-70 V for the first time

Now that you have CP-70 V up and running, let's take it for a quick test drive!

If you haven't done so already, launch CP-70 V as a plug-in or as a stand-alone instrument. If you have a MIDI controller set up, use it to play some notes on CP-70 V. You might first need to activate your MIDI controllers in the MIDI Settings (see above). You can also use your mouse to play the on-screen keyboard or use the keys of your computer keyboard.

The up and down arrows at the top of the instrument let you step through all of CP-70 V's available presets. Try playing a few, and when you find one that you like, try adjusting some of the other on-screen controls to see how they affect the sound.

Play with the controls, and don't worry – nothing is saved unless you specifically save a preset (described later in this User Guide), so there is no risk you'll mess up any of CP-70 V's factory presets.

We hope this chapter has gotten you off to a smooth start. Now that you're up and running, the rest of this guide will help you work your way through all of CP-70 V's features on a section-by-section basis. By the time you reach the end, we hope you'll understand all of CP-70 V's capabilities – and will be using this fantastic instrument to create equally fantastic music!

# 3. MAIN PANEL



The main interface is where you control the key aspects of CP-70 V, which are relatively simple since the hardware instrument itself had few controls. In fact, without the Advanced or FX panel open, you will see just the Volume, EQ, and Tremolo knobs.

# 3.1. Common behaviors

All Arturia virtual instruments share some common control behaviors to make editing sounds easier. These behaviors are common across the instrument (such as in the Advanced and FX panels), not just the main panel.

#### 3.1.1. Value pop-ups



Move or hover on any control and a pop-up banner or "tool tip" will display its value.

# 3.1.2. Parameter descriptions

#### Tremolo Speed (Hz): Sets the speed of the tremolo (Hz)

Operating or hovering on any control displays its name and a brief description of its function in the left corner of the lower toolbar [p.54].

#### 3.1.3. Fine adjustment

Hold the right mouse button or Control key while dragging on any knob 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 to return it to its factory default setting.

# 3.2. Main sound controls

This is the main control section of CP-70 V, replicating the hardware controls found on the original instrument.

### 3.2.1. Volume



The volume knob sets the level of the direct output, upstream of the effects [p.25]. As mentioned in the Welcome chapter, CP-70 V features both direct and stereo-miked samples. The relative levels of both sample sets can be adjusted in the Output Section [p.23] of the Advanced Panel, which is covered in the next chapter.



#### 3.2.2. Tone controls

The hardware CP-70 offered a simple three-band EQ. The **Bass**, **Middle**, and **Treble** knobs on CP-70 V's main panel duplicate their frequency response and crossover characteristics exactly. These are boost/cut controls, meaning that the response of each band is unchanged when its knob is set at a value of 5 (12 o'clock).

The tone controls affect only the direct output samples, not the stereo-miked samples.

#### 3.2.3. Tremolo



The CP-70 also featured a built-in tremolo. It effects both of the direct outputs if used in stereo, reducing the volume of one as the other increases. There's a great stereo panner [p.42] among the pedal effects, which we'll get to in chapter 5.

The tremolo controls are straightforward: There's an **On/Off** switch, a **Depth** knob to adjust the intensity, and a **Speed** control with a range of 0.945 to 11.1 Hz. Like the tone controls, the tremolo affects only the direct output of CP-7OV.

#### 3.2.3.1. Tremolo tempo sync



The Speed pop-up when Tremolo tempo sync is active

Tremolo can sync to tempo; you set this in the Output Section [p.23] of the Advanced Panel. When tempo sync is active, the Speed knob's pop-up displays multiples or divisions of your host/project tempo, as shown above.

- "t" after the pop-up value indicates a triplet feel
- "d" after the pop-up value indicates a dotted feel
- no suffix after the pop-up indicates a straight rhythmic feel

J What's the difference between tremolo and vibrato? Vibrato is defined as regular, periodic modulation of *pitch*, whereas tremolo is modulation of *volume*.

# 3.2.4. Onscreen keyboard



As on the original, the CP-70 V onscreen keyboard has six octaves of notes beginning and ending on *E*. We did not want to pitch-shift samples because this can create an unnatural sound. So, keys below the lowest *E* or above the highest one (if you're playing an 88-key controller, for example), do not sound.

Clicking on a key closer to its front lip increases the MIDI velocity of the note.

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3.2.4.1. Playing from a computer keyboard

Notes corresponding to keys on the computer keyboard

You can play an octave plus a ninth in the key of C using a standard QWERTY keyboard, according to the diagram above. In addition, the Z key shifts the pitch range an octave down and the X key shifts it an octave up.

# 4. ADVANCED PANEL



The Advanced Panel lets you fine-tune how CP-70 V sounds and responds to your playing. Click the Advanced button [p.53] at the top right of the upper toolbar to expand the CP-70 V window downward and display all the advanced settings.



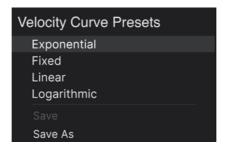
# 4.1. Velocity Curve

The factory preset exponential velocity curve in CP-70 V

CP-70 V features an adjustable velocity curve with factory presets as well as the ability to create, save, and recall your own. This lets you customize CP-70 V to your own touch and MIDI controller keyboard.

The horizontal (X) axis of the graph indicates MIDI velocity as played; the vertical (Y) axis represents the sound you hear – which can be both louder and brighter at higher velocities.

#### 4.1.1. Velocity curve presets



CP-70 V comes with four velocity presets that behave as follows. Click on the word *Presets* to pull down this menu:

- Exponential: Has a "dip" in the middle regarding a given velocity triggering a given volume, i.e. keyboard response is heavier
- Linear: Regular, progressive relationship between velocity and volume
- Logarithmic: Has a "hump" relating velocity to volume; i.e. keyboard response is lighter
- Fixed: Heard volume is the same at any playing velocity

Note the *Save* and *Save As* options in the menu. If you save a user preset using *Save As*, it will then appear in the same list as the factory velocity presets. Which brings us to the next section.

# 4.1.2. Creating your own velocity curves

You can make and save your own velocity curves in CP-70 V, then save them as presets. These will then show up in any overall sound Preset you call up.



A breakpoint is circled in red; a grab handle in yellow

Creating your own curves begins with two simple tools: *breakpoints* and *grab handles*. A *breakpoint* is a point at which the slope or shape of the curve can change.

Left-click on the graph to add a breakpoint. Right-click on the point to delete it. A velocity curve can have up to 16 breakpoints including the first and final ones, which cannot be removed.

Between any two breakpoints is a *grab handle* that you can drag to change the shape or intensity of the curve between those two points. Leaving a handle in mid-position would create a more or less straight line between points. Dragging it as far as it will go in a direction generally creates a steep "knee" shape.

Between grab handles and breakpoints, any shape can be created, letting you surgically craft different responses for precise velocity ranges.

Once you are satisfied with your curve, you can *Save As* it as a velocity preset, then *Save* (user presets only) to overwrite your work with future edits under the same preset name.

	ADVAI	ICED SETTINGS	
Tuning	440.0 Hz	Volume	99.6 %
Detune	0.0 %	Tremolo Sync	•
Timbre Shift		Vibrato Speed	1.1 Hz
Dynamic Range	40.0 %		
		Volume	48.8 %
		Stereo Width	100.0 %
Env Attack	0.0 %	Natural Releases	100.0 %
Env Release	50.0 %	Key Release	64.4 %
		Sustain Pedal	25.0 %

# 4.2. Advanced Settings

Here is where you can finely adjust a myriad of aspects of the sound of CP-70 V, such as the timbre of the samples, mechanical noises such as key releases, the balance of direct and stereo-miked samples, tempo sync of the built-in tremolo, and more. It is divided into four subsections: Instrument, Envelope, Output, and Noises. Drag up or down on the numerical fields to change their values.

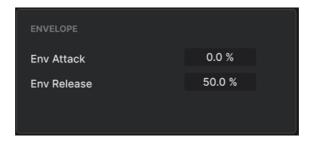
#### 4.2.1. Instrument Settings

INSTRUMENT		
Tuning	440.0 Hz	
Detune	0.0 %	
Timbre Shift	0	
Dynamic Range	40.0 %	

These settings affect the basic character of the CP-70 V instrument.

- Tuning: This adjusts the overall tuning of CP-70 V, the default being A = 440.0 Hz.
- Detune: Increasing this parameter varies the notes' tuning in relation to each other while keeping the overall Tuning setting. A little bit creates a pleasant, chorus-like sense of depth. Higher settings sound like an actual out-of-tune piano.
- **Timbre Shift:** Varies the samples from soft and muted (negative values) to bright and metallic (positive values). The control does this by re-pitching samples across the keyboard.
- Dynamic Range: Adjusts the overall range of volume between notes played very softly and very hard, while retaining differences in timbre (brightness vs. mellowness). The velocity curve still applies within the overall "bookend" limits set by Dynamic Range – think of it as a scaling control for the velocity curve.

#### 4.2.2. Envelope Settings



 $\mathsf{CP}\text{-}\mathsf{7O}\ \mathsf{V}$  uses a simple attack-release envelope to expand the instrument's creative possibilities.

- Attack: Adjusts the time it takes for the note to reach full volume when a key is played.
- **Release:** Adjusts the time the note takes to decay into silence once a key is released.

The human ear identifies instrument sounds mainly during the attack phase of a note, so increasing this parameter can create a bowed or violin-like sound. On the other hand, the Release setting here is not intended to provide dramatic amounts of sustain. It is more akin to how quickly the dampers return to the strings, with a setting of 100 percent sounding like sluggish or sticky dampers. Use Release values around 50 percent for the most natural sound.

## 4.2.3. Output Settings

DIRECT OUTPUT		
Volume	99.6 %	
Tremolo Sync		
Vibrato Speed	1.1 Hz	
MICROPHONES		
Volume	48.8 %	
Stereo Width	100.0 %	

The Output section is where you balance the direct and miked samples, and is also home to tempo settings for the tremolo. It is divided into two subsections.

#### 4.2.3.1. Direct Output

These three controls govern the direct volume and, because tremolo only applies to the direct output, the tremolo as well.



When Tremolo Sync is active, Speed changes from Hz to a multiple or division of host tempo

- Volume: This adjusts the volume of the direct output only It mirrors the Volume [p.16] knob from the main hardware panel.
- Tremolo Sync: Toggles whether tremolo free-runs in Hertz or is tempo-synced.

• **Vibrato Speed:** Controls the tremolo Rate With Sync engaged, dragging on this field will step through the full range of straight, dotted, and triplet values. Dotted values are indicated by a *d* suffix here and in the pop-up tool tip [p.15]; triplet values display a *t*. This is a mirror of th **Speed** knob on the main hardware panel.

#### 4.2.3.2. Microphones

- Volume: Controls the volume of the microphone-recorded samples only.
- Stereo Width: Sets the panning of the stereo mics, from mono (zero) to hardpanned left and right (100 percent).

## 4.2.4. Noises Settings

NOISES	
Natural Releases	100.0 %
Key Release	64.4 %
Sustain Pedal	25.0 %

This section rounds out CP-70 V with the nuances of the original instrument's mechanical noises.

- Natural Releases: Sets the volume of the natural decay of the sound after keys have been released.
- **Key Release:** Adjusts the volume of the sound the hammers make as they return to their resting state after striking the strings.
- Sustain Pedal: Varies the volume of the sound made by *all* the dampers pulling away from the strings when you depress a connected sustain pedal.

# 5. EFFECTS



CP-70 V includes a suite of powerful stereo effects curated from our latest V Collection of virtual instruments. You can use up to four effects at once, and each of the four effects slots offers a choice of 12 pedal-style effects. Then, there is an Amp Simulator [p.44] with Twin Amp and Rotary Speaker models, followed by a state-of-the art Convolution Reverb [p.46] offering nine room types.

Click the **FX** button at the top right of the CP-70 V window to navigate here.

# 5.1. Effects routing



CP-70 V effects are routed serially

Effects routing in CP-70 V is "hard wired" as serial. The signal is first processed by the effect in the slot at far left, then simply moves from left to right. This keeps things simple. Just set up the effects chain you want, not unlike a guitar pedalboard. The dedicated amp simulator and reverb/room simulator are always in the next-to-last and last positions, respectively.

#### 5.1.1. Effects swap

In the first four slots, you can change the position of any pedal effect in the chain. Simply click and hold on its background (anywhere but on a switch or knob) and drag it to the desired slot. Whatever effect is currently in the destination slot will swap to the dragged effect's previous position.

# 5.2. In, Out, and Bypass



There is a global Bypass button on the Effects tab, as well as individual on/off buttons for each of the slots. In all cases, these will disable the effect(s) without losing any of their settings. This is a great tool for comparing dry and wet sounds as you craft your tracks.

There are also pre (In) and post (Out) level controls. **In** determines how strong a signal feeds the effects chain, and **Out** adjusts the level returned to the main outputs. If the global bypass is engaged, these knobs will not affect the audio level.

# 5.3. Selecting an effect

FX 1 Туре		
No	one	
Spatial	Dynamics	
Reverb	Compressor	
🔊 Delay	Limiter	
🔊 Analog Delay		
🔊 Tape Echo		
Distortions	Modulations Chorus Shanger Changer	
EQs	I Stereo Pan	
▲ Equalizer	CryWah	

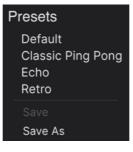
The pedal effects in CP-70 V offer 13 types in five categories

Click the name field at the top of any of the effects slots (you can also click any empty square that says "none" above it) to bring up the effects selection menu. The effects are divided into five categories to make choosing a little easier.

- Spatial: Reverb, delays, and tape echo
- Dynamics: Compressor and limiter
- Distortion: Distortion effect with five different algorithms
- EQs: Parametric equalizer
- Modulations: Choruse, flanger, phaser, stereo panner, and wah-wah

The full list of effect types [p.29] with descriptions of all their parameters is below.

## 5.4. Effect presets



The factory presets for the Delay effect in CP-70 V

Each effect types in CP-70 V comes with a handful of presets, accessed by clicking on "Presets" at the top right of the name bar within an effects slot.

The presets can be great starting places, not to mention convenient for when you want to grab a quick sound, so please do explore them all. Notice the "Save as" option, which will bring up a dialogue box that prompts you to name and save any settings you like as your own FX preset. This is then saved within the overall CP-70 V Preset. "Save" is available only when working on a user preset, i.e. one you've already copied with a "Save As" operation.

# 5.5. Pedal Effect types

Now it's time to meet each effect type individually. In this section, we will cover the pedalstyle effects, then devote separate sections to the amp and room simulators.

#### 5.5.1. Dry/Wet mix



Every effect except for the Equalizer has a knob (the amp and room simulators have sliders) for **Dry/Wet mix**, i.e. how much pre-effect vs. post-effect signal you hear.



#### 5.5.2. Effects tempo sync



Engaging Sync makes tempo-division options available for the time setting in the Delay

Some effects offer tempo-sync options for their time or rate parameter. This is activated by clicking a **Sync** toggle switch. Then, adjusting the related parameter will display a pop-up that shows the current division or multiple of your project tempo. A *t* suffix after the value indicates a triplet value, *d* denotes a dotted value, and no suffix means a "straight" rhythmic feel.

The effects with tempo sync in CP-70 V are:

- Delay
- Analog Delay
- Tape Echo
- Phaser
- Stereo Pan

Now let's visit the effects in the order in which they appear on the menu.

#### 5.5.3. Reverb



**Reverb** is the sound of a space – a recording studio, concert hall, stairwell, tiled bathroom, you name it. Reverb is often used as the final effect in a chain to put everything else that's going on into the same acoustic space, lending cohesiveness to the sound. (Remember that CP-70 V also offers sophisticated convolution reverb via the room simulator. The pedal reverb here is a "quick and dirty" algorithmic type.)

Control	Description
Pre Delay	Sets the amount of time before the input signal is affected by the reverb
Decay	Determines the length of time the reverb effect will last
Size	Adjusts the size of the room: counter-clockwise is smaller, clockwise is larger
Damping	Controls the rate at which the high frequencies decay
HP Filter	Reduces the low-frequency content and allows highs to pass before processing
LP Filter	Scoops out the high-frequency content and allows lows to pass before processing
MS Mix	Adjusts the reverb from mono to an increasingly wide stereo space

# 5.5.4. Delay



Delay is a generic term for any effect that makes a copy of an input sound and repeats it later, one or more times. There are three delay effects in CP-70 V, and this first one sounds good all around.

Control	Description
Time	Changes the length of the delay, with unsynced and tempo-sync options (sync, triplets, dotted)
Feedback	Adjusts how many times the delay will repeat
Stereo	Higher values increase the distance between the left and right iterations of the echoes
Sync	Activates tempo sync for the Time setting
Ping Pong	Toggles alternating left/right echoes with exact rhythmic spacing
HP Filter	Higher values cause increased reduction of low-frequency content with each echo
LP Filter	Higher values cause increased reduction of high-frequency content with each echo

## 5.5.5. Analog Delay



The Analog Delay sinulates classic "bucket brigade" delay lines, in which each successive analog circuit added an additional repeat to the incoming signal. Analog Delay in CP-70 V features a built-in LFO that can modulate the main delay time for trippy effects.

Control	Description
Time	Sets delay time, with unsynced and tempo-sync options
Feedback	Controls how much of the delayed signal feeds back into the effect to be delayed again
Feedback Tone	Adjusts the brightness of the signal feeding back into the effect
Sync	Activates tempo sync option for the time and rate settings
Rate	Adjusts the rate of the LFO that modulates the delay time; also subject to tempo sync
Depth	Adjusts the intensity by which the LFO modulates the delay time

## 5.5.6. Tape Echo



**Tape Echo** is a characteristic of early tape-based delay machines such as the Maestro Echoplex and Roland Space Echo. Input sounds are recorded to a loop of tape with one or more playback heads to create the echoes. Because tape loops can be unstable and shift in pitch and timbre, they produce an effect that is warmer and less precise than a digital delay.

Control	Description
Bass	Boosts or cuts the lower frequencies of the delayed signal only
Treble	Boosts or cuts the higher frequencies of the delayed signal only
Time	Changes the length of the delay, with unsynced and tempo-sync options
Intensity	Sets the feedback amount of the delayed signal.
Sync	Activates tempo sync option for the time setting
Input	Sets the initial gain of the Tape Echo effect; turn up to mimic analog tape saturation
Echo	Sets the output volume of the taps (repeats) only

### 5.5.7. Distortion



**Distortion** in CP-70 V is actually five different kinds of distortion. They're derived algorithms from our flagship distortion effect called Dist COLDFIRE. Each has its unique sonic signature – and they can transform sounds in ways ranging from subtle warmth to all-out devastation!

FX1 Distortion Type
BitCrusher
✓ Overdrive
Wavefolder
Waveshaper
Таре

The five distortion types

Select the distortion by clicking on the left and right arrows at the top, or bring up a menu by clicking on the distortion type name between the arrows.

#### 5.5.7.1. Overdrive

This simulates the classic overdrive sound achieved by running the input gain "hot" on a transistor or tube amplification circuit.

Controls	Description
Drive	Sets the amount of distortion via driving the input
Out Gain	Use this to compensate for increased output gain caused by the Drive setting

## 5.5.7.2. Wavefolder

Imagine you could fold over the peaks and valleys of an audio waveform to create a more harmonically complex wave. That's what wavefolding does.

Controls	Description
Drive	Sets the amount of wavefolding via driving the input
Out Gain Use this to compensate for increased output gain caused by the Drive setting	Use this to compensate for increased output gain caused by the Drive setting
Туре	Selects whether the folded peaks and valleys are smoothed out (sine) or not (hard)

### 5.5.7.3. Waveshaper

A waveshaper alters the rise and fall time of a waveform's cycle. For example, applying a waveshaper to a triangle wave and shortening the rise time of each cycle turns the triangle wave into a falling sawtooth wave. Further, a waveshaper can affect the curvature of a rising or falling signal, producing even more unusual harmonic changes.

Controls	Description
Drive	Sets the amount of waveshaping via driving the input
Out Gain	Use this to compensate for increased output gain caused by the Drive setting

### 5.5.7.4. Tape

This algorithm in the Distortion effect simulates the saturation analog tape produces when a "hot" signal is recorded.

Controls	Description
Drive	Sets the amount of tape saturation via driving the input
Out Gain	Sets the post-saturation output level of the effect

### 5.5.7.5. Bitcrusher



A **bitcrusher** does exactly what it sounds like: it crushes bits! Technically, it can reduce both the bit depth and the sample rate of the signal. Bit depth (e.g. 16-bit vs. 8-bit) deals with differences in volume; sample rate (e.g. 44,100 kHz, like a CD) deals with frequency response. When musicians talk about the "lo-fi" sound of vintage samplers, game consoles, or computers, they're talking about bitcrushing.

Control	Description
Bit Depth	Reduces the number of bits used to render gradations in amplitude.
Downsample	Divides the sample rate used to represent the signal.

## 5.5.8. Equalizer



An equalizer lets you sculpt tone very precisely, as opposed to the very broad tonal strokes you get from a synth filter or tone controls. It can gently or surgically boost or cut certain frequencies to alter the overall sound or remove problematic frequencies.

The EQ in CP-70 V has three bands. You can adjust the frequency and gain (boost or cut) for the high and low bands, as well as the Q (how wide the band is around the selected frequency) for the midrange band.

Control	Description
Gain	Adjusts the boost or cut to the level of the current band
Frequency	Selects the center frequency of the current band
Q Adjusts the width of the spectrum around the Frequency that is affected by the mid band only	Adjusts the width of the spectrum around the Frequency that is affected by the boost or cut; mid band only
Scale	Adjusts the overall impact of the EQ curve on your sound

### 5.5.9. Compressor



A **Compressor** is used to control the dynamic range of a sound: it reduces the difference between the softest and loudest levels a sound can have. It does this based on reducing a gain by a certain amount (the ratio) once the audio releases a certain level (the threshold).

Control	Description
Threshold	Sets the level where compression will begin
Ratio	Determines the amount of compression to be applied once the threshold is reached
Attack	Adjusts the speed with which the compression will be applied once the threshold is reached
Release	Sets the release curve of the compressor
Output Gain	Use this to compensate for changes in volume if compression settings lower the output gain
Make Up	Enables control of the output level to compensate for the gain reduction of the input

J There's an old analogy for understanding compressors. Threshold is how loud your music has to be before your parents tell you turn it down. Ratio is how much you turn it down. Attack is how fast your parents react once it's too loud. Release is how soon you turn it back up once they're gone.



A limiter is like a compressor in that it manages the loudness of your signal. However, instead of reducing the signal by a certain ratio, it places an absolute ceiling on the sound level. This is why you'll sometimes hear limiters called "brick wall" devices.

Control	Description
Input Gain	Sets the overall level feeding the limiter
Release	Sets the time it takes for the limiter to "let go" of the signal
Output Level	Adjusts the overall output level of the limiter while preserving the internal limiting amount

## 5.5.11. Chorus



**Chorus** is an effect first developed in the mid-1970s by Roland for the Jazz Chorus amplifier and CE-1 pedal. In a chorus, the dry signal is mixed with one or more slightly delayed copies of itself (called *voices*), whose amount of delay is gently varied by an LFO to create a sense of thickness.

Control	Description
LFO Freq	Adjusts the speed of the chorus
Depth	Controls the intensity of the chorus
Feedback	Adjusts the amount of chorused signal that is fed back into the effect
Delay	Sets the amount of delay applied to the input signal
Stereo	Toggles mono or stereo operation
Voices	Toggle switch selects the number of delay lines the chorus will use (1, 2, or 3), with a different starting phase for each voice
Shape	Toggles modulation LFO between sine and triangle waveforms

## 5.5.12. Flanger



The **Flanger** is the an intense time/modulation effect. It originated with audio engineers pressing on the flange (rim) of a moving tape reel to slow down the playback a tiny bit. Combined with the original signal, this produces the signature "jet engine" effect.

Control	Description
LFO Freq	Adjusts the rate of the LFO that controls the flanging speed
Depth	Sets the intensity of the flanging
Feedback	Adds feedback for a harsher or "ringing" sound. Maximum is 99% to avoid runaway feedback
Stereo	Toggles mono or stereo operation
Phase Invert	Click to toggle flanger between additive and subtractive operation
HP Filter	This determines the amount of low-frequency content that the flanger effect will receive
LP Filter	Use this to reduce the amount of high-frequency content that will enter the flanger effect

## 5.5.13. Phaser



Phase shifting splits the incoming signal, changes the phase of one side, and recombines it with the unaffected signal. Modulation of this signal via an LFO results in a notch-comb filter that sweeps through the frequency spectrum, causing that familiar "whooshing" sound.

T Two iconic uses of the phaser are on analog strings by Gary Wright and Jean Michel Jarre, and on electric piano by Steely Dan.

Control	Description
Rate	Adjusts the rate of the phaser, with unsynced and tempo-synced options
Feedback	Controls the amount of phased signal feeding back into the effect for a more resonant sound
Depth	Adjusts the intensity of the phasing effect
NB Poles	Determines the steepness of the phaser's filter frequency response
Sync	Activates tempo sync option for the rate setting
Mono/ Stereo	Toggles the phaser between mono and stereo output



 ${\bf Stereo}\ {\bf Pan}$  lets you automatically control and move the stereo position of the CP-70 V sound, to provide motion and breadth.

Control	Description
Rate	Controls the speed of stereo panning
Shape	Selects the waveform according to which the sound is panned: sine, triangle, saw, ramp, or square
Sync	Activates tempo sync option for the rate setting
LP Mono	When engaged, low frequencies will not be panned, as may be desirable for a solid bass sound with movement in the treble

# 5.5.15. CryWah



Based on the iconic "cry baby" wah pedal, this effect follows the volume envelope of the sound and applies a filter sweep as notes are struck, for a classic wah-wah tone.

Control	Description
Manual	Sets the center frequency around which the effect is most strongly applied
Sensitivity	Sets the threshold for the envelope follower to engage and trigger the wah effect
Rate	Adjusts the speed of the repeating wah effect
Depth	Determines the intensity of the wah effect

## 5.6. Amp Simulator

Downstream of the four pedal-type effects slots, this models two kinds of amplified speaker cabinets that a CP-series electric grand might have been plugged into. Click on the effect name to select the Rotary Speaker or Twin Amp.

## 5.6.1. Rotary Speaker



Invented by Don Leslie and most often paired with the tonewheel organ, the rotary speaker fired a treble driver into a spinning horn and a bass speaker into a spinning drum-shaped baffle to create a sense of spaciousness. Its sound is legendary.

Control	Description
Rotary Type Select	Chooses among five rotary cabinet models
Main/Advanced	Toggles display between main and advanced settings (see below)
Fast	Switches rotors between slow and fast speeds
Brake	Stops rotor motion while maintaining the cabinet simulation properties of the effect
Stereo	Adjusts the panning of virtual stereo mics aimed at the rotary cabinet
Balance	Sets the tonal balance between bass and treble rotors

J Regarding the rotary types, "closed" and "open" refer to whether the virtual mics are pointed at the cabinet's exterior or directly at exposed rotors, respectively. 122 and 147 are two classic models of rotary speaker, with the latter generally associated with a brighter, more "rock" sound.

### 5.6.1.1. Advanced Rotary Controls



The advanced tab lets you tweak slow and fast speeds, plus transition times, for the treble and bass rotors independently.

Control	Description
Slow	Sets speed for the treble horn or bass drum rotor when main speed is slow
Fast	Sets speed for the treble horn or bass drum rotor when main speed is fast
Accel	Sets transition time between slow and fast, or fast and slow, for the treble horn or bass drum

### 5.6.2. Twin Amp



Dedicated keyboard amps were not plentiful in the heyday of the CP-70, so players might have used a bass or guitar amp. Twin simulates an amp from a famous guitar maker, which imparts a more aggressive sound to the CP. Like the original hardware, our Twin model includes a spring-style reverb and tremolo.

Control	Description
On Axis	Simulates pointing a mic directly at the speaker cone at a 90-degree angle, which can result in a more focused sound
Bright	Adds a treble boost
Drive	Sets the input gain; turning this up can produce a somewhat overdriven tone
Reverb	Adjusts the depth of a spring reverb built into the Twin effect
Bass, Mid, Treble	These are simple tone controls that boost or cut the desired frequency range
Speed	Sets the speed of the built-in tremolo
Intensity	Sets the depth of the built-in tremolo

# 5.7. Room Simulator



The room simulator (reverb by a more familiar name) in CP-70 V uses a process called *convolution* to create stunningly realistic acoustic spaces. In convolution, a room model that is initially created by recording sounds with sharp transients (handclaps, gunshots, etc.) in the actual space. It's not unlike sampling, but for reverb. Then, a computer algorithm extrapolates how a different audio signal, such as notes from an electric grand piano, would sound in that space.

## 5.7.1. Room Types



The room types available in CP-70 V

Click on the room name below the image to select the virtual acoustic space. As shown above, there are nine choices, including two plate simulations based on the large metal plates top studios once used to create reverb.

## 5.7.2. Room Parameters

For an effect that's doing so much behind the scenes, the settings are simple.

Control	Description
Pre-Delay	Adjusts the time before early reflections heard
Size	Adjusts the size of the virtual acoustic space
Decay	Changes the length of the reverb "tail" as the sound dies out

I Searly reflections are the first reflections of sound inside a space, and often responsible for the classic echo or slap-back effect.

# 6. USER INTERFACE



This chapter covers everything that is not in the main panel and advanced views – all the utilitarian functions that make CP-70 V a joy to use in a modern music production environment.

The toolbars above and below the main panel [p.15] of CP-70 V contain a number of important functions for Preset selection, housekeeping, and other utility settings.

Then there's the side panel, where you make important global and MIDI settings, where you can use and create Macros [p.63] to control several settings with a single control movement, and can explore CP-70 V via interactive tutorials.

The Upper Toolbar includes:

- The Main Menu [p.49]
- The Preset Name Pane and Preset Browser [p.66] access button
- The button to open the Advanced Views [p.53]
- The button to open the Effects [p.25] panel
- A gear-shaped icon that opens the side panel [p.57]

The Lower Toolbar includes:

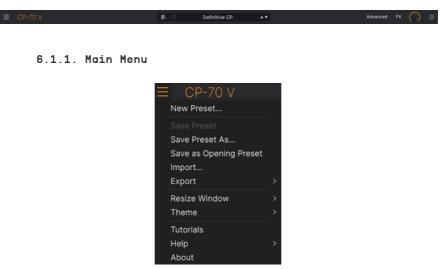
- The parameter description area [p.15] that shows info when you hover over any control
- Undo, Redo, and History [p.55]
- The CPU Meter [p.56] and Panic [p.56] functions
- Duplicate knobs for the Macros [p.56] in the side panel
- A corner grab handle [p.56] for resizing the CP-70 V window

The side panel includes:

- Settings [p.57]
- MIDI [p.58]
- Macros [p.63]
- Tutorials [p.52]

# 6.1. Upper Toolbar

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



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.

### 6.1.1.1. New Preset

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

#### 6.1.1.2. 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.

This option saves the current settings of CP-70 V under a new Preset name. Clicking this option reveals a window where you can name your Preset and enter more detailed information about it:

Ne M'Oublie Pas	Stephen Fortner		tric grand sound from the song "Don't You Forget
		About Me" by Simple Min	ds. Chorus depth assigned to knob 8 of my controller.
User 🗸 🗸	Classic EP		
		: Bizarre Bright Ctassic Deep Dirty Funky slow Melodic Punchy oft Soundscape Thin	CINALACTIONSTICS Gittch Granuar Hoover Hybrid Layered Leste Long Muth/Spit Natural Noise Phrases Processed Random Resea Reverb Reversed Rise Sample-based Sequence/Loop Short Slow Attack Solo Stab Synced Synth Transient Tribute Vibrato Wah • Cancel Save

 $\Gamma$  The Bank, Author, and Type fields are all useful when searching for Presets in the Preset Browser [p.66]. All of the words in the boxes below are tags [p.67], which can further help refine searches in the Preset Browser.

### 6.1.2. Save as Opening Preset

This menu item only appears if you're using CP-70 V in a DAW as plug-in. It saves the current Preset so that it is the default whenever you instantiate CP-70 V in an instrument track.

#### 6.1.2.1. 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.

### 6.1.2.2. 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 .CPX.



• **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.

	Zoom Out (Cmd -)
	Zoom In (Cmd +)
	50%
	60%
	70%
	80%
	90%
	100%
	120%
	140%
√	160%
	180%
	200%

### 6.1.2.3. Resize Window

CP-70 V 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.

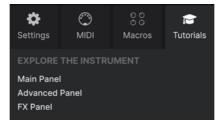
You can also do this using keyboard shortcuts: every time you press CTRL- (Windows) or CMD- (macOS), the window will shrink by one size increment, and every time you press CTRL+ (Windows) or CMD+ (macOS), the window will grow by one size increment.

In addition, you can click-drag the resize handle [p.56] at the right of the lower toolbar to make the CP-70 V window any size.

### 6.1.2.4. Audio MIDI Settings

These appear only if CP-70 V is working in stand-alone mode. Used as a plug-in, these are handled in the context of your DAW or host software. Refer to the chapter on Activation [p.9] for details on the settings for both Windows and macOS. They work in much the same way in stand-alone mode.

### 6.1.2.5. Tutorials



CP-70 V 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.

### 6.1.2.6. 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.

#### 6.1.2.7. About

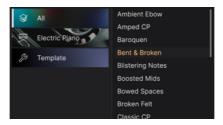
Here you can view the software version and developer credits. Click again anywhere on the screen (outside the About window but inside the plug-in) to make this pop-up window disappear.

### 6.1.3. Preset Browser access and Name Pane



The Preset Name Pane

Clicking the "books on a shelf" button opens the Preset Browser [p.66], which offers a myriad of ways to browse, sort, and organize Presets in CP-70 V. You can also press control-enter to open the browser.



Clicking on the Preset name also opens up quick drop-down menus for selecting Presets outside of the Browser, as shown above. You can select to look at lists of Presets organized by Type (the left column) 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.66]. This includes working with Favorites, which are tagged by clicking the heart icon.

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

### 6.1.4. Advanced Button



Near the upper right corner of the top toolbar is the **Advanced Button**. This expands the lower area of the window into the Advanced Panel [p.19], where the velocity curve editor and other advanced settings are found.

## 6.1.5. FX Button



Clicking this button opens up the Effects [p.25] panel, which is covered in detail in chapter 5 of this manual.

### 6.1.6. Main Output Volume



This simply controls the overall output level of CP-70 V. It is the final volume stage, downstream of any other instrument or effects parameter that affects levels. It can be useful for adjusting the instrument's level in a DAW track, especially if the signal is too loud, without needing to switch to your DAW mixer view.

## 6.1.7. Gear icon



This opens the side panel [p.57] where settings, Macros, and tutorials reside.

## 6.2. Lower Toolbar



The right side of the lower toolbar in CP-70 V

The Lower Toolbar of the CP-70 V interface can be thought of in terms of left and right halves. On the left is the Control Description display, and on the right there are buttons for several useful utility functions.

### 6.2.1. Parameter descriptions

Tremolo Speed (Hz): Sets the speed of the tremolo (Hz)

This control description pops up when you mouse over the Tremolo Speed knob in the Main Panel

Operate or hover on any knob, button, icon, or other control, and a brief description of what it does appears in the lower left-hand corner. That's pretty much the only thing on the left side.

6.2.2. Undo, Redo, and History



When editing a virtual instrument, 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, CP-70 V offers comprehensive Undo, Redo, and History functions so that you always have a safe way back.

### 6.2.2.1. 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.

### 6.2.2.2. 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.

### 6.2.2.3. History

Click the "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 CP-70 V since you opened it in stand-alone mode or opened a DAW project containing it. 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.

### 6.2.3. CPU Meter



At far right is the **CPU Meter**, which displays the overall load CP-70 V is placing on your computer CPU. Since it deals only with this plug-in, it is not a substitute for the resource metering tools in your DAW.

### 6.2.3.1. 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-soundsoff command that silences any sound processed through CP-70 V. 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.

### 6.2.4. Macro controls



These controls can affect multiple parameters by turning just one of them, and mirror the actions of those found in the Macros [p.63] tab of the side panel. Factory Presets are preprogrammed with useful Macros.

#### 6.2.5. Resize handle



Grab and drag the diagonal lines to the right of the Macro controls to resize the CP-70 V window. When you release the mouse, the window will snap to the closest size available in the Resize Window [p.51] item of the main menu [p.49].

### 6.2.6. 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 CP-70 V. Click it to restore a full view of the open controls.

## 6.3. The Side Panel

The gear-shaped icon at the top right of the Upper Toolbar opens the **Side Panel**, which in turn contains four tabs covering important subsystems that you won't have to access quickly when you're playing or editing sounds in CP-70 V:

• Settings: Global settings such as MIDI receive channels and accessibility

• MIDI: MIDI Learn functions for use with MIDI CC messages sent from a controller or DAW

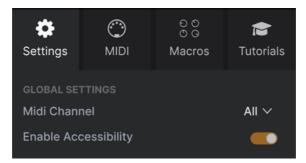
 $\bullet$   $\mbox{Macros}$  : Assignments for four Macros that can control multiple parameters with a single knob twist

• Tutorials: In-app interactive tutorials, also accessible from the main menu

Let's look at them from left to right.

## 6.3.1. Settings Tab

This tab covers settings to control how a Preset responds to incoming MIDI.



The Side Panel's Settings tab

## 6.3.1.1. MIDI Channel

Selects the MIDI channel(s) on which CP-70 V will receive MIDI input. You can select a particular channel, or choose "All" for Omni Mode.

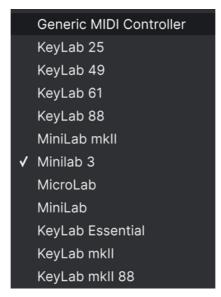
This gives your computer's system-level accessibility tools for differently abled persons access to CP-70 V.

## 6.3.2. MIDI Tab

Settings		⊖ ⊘ © Ģ Macros	Tutorials				
MIDI CONTROL MIDI Controller Generic MIDI Co ∽							
MIDI Con	fig		* 🗸				
Learn							
Ch CC	C Control	Min	Max				
1 74	EQ Bass	0.00	10.0				
1 71	EQ Mid	0.00	10.0				
1 76	EQ Treble	0.00	10.0				

The Side Panel's MIDI tab

This is where CP-70 V may be placed in MIDI Learn mode. In this mode, all MIDIassignable parameters on the main the Hardware Panel, the Advanced View, and the FX are highlighted. You can map physical controls on your MIDI controller to them. A typical example might be to map a real expression pedal to the Master Volume control, or a physical knob on the MIDI controller to the Frequency knob of the Filter section.



The MIDI Controller menu

At the top right of the MIDI tab is the **MIDI Controller** drop-down menu, where you can select templates for many Arturia MIDI controllers. These map physical controls to many "most wanted" parameters in CP-70 V for a plug-and-play experience. A Generic template is also provided for third-party MIDI controllers.

### 6.3.2.2. MIDI Config menu



The MIDI Config menu

The **MIDI Config** drop-down lets you manage different sets of MIDI maps for controlling CP-70 V from MIDI hardware. You can Save/Save As the current MIDI assignment setup, Delete it, Import a configuration file, or Export the currently active one.

This is a quick way to set up different hardware MIDI keyboards or controllers with CP-70 V, without having to build all the assignments from scratch each time you swap hardware.

For example, if you have multiple hardware controllers (small live keyboard, large studio keyboard, pad controller, etc.), you can create a profile for each of them, save them, and then quickly load them here. This saves you from having to redo the MIDI mapping assignments from scratch each time you swap hardware.

Two options in this menu are especially powerful:

- Default: Gives you a starting point with predetermined controller assignments.
- Empty: Removes the assignments of all controls.

#### 6.3.2.3. Assigning and unassigning controls



When MIDI Learn is active, available parameters are purple and already assigned parameters are red.

Click the **Learn** button in the MIDI tab to put CP-70 V into Learn mode. Controls available for assignment are purple. Controls that are already assigned are red, but can be reassigned if desired. The screenshot above shows the assigned and unassigned controls for CP-70 V's Default configuration.

Click any purple control and its name will appear in the list. Now, move a control or operate a switch on your MIDI controller. The corresponding control onscreen will turn red and the assigned MIDI CC number will appear in the list to the left of the parameter name.

To unassign a control onscreen, control-click or right-click it. Alternative methods of assignment are available in the MIDI Parameter Menu [p.62] described below.

■ Controls in the Main, Advanced, and FX areas are all available for MIDI learning, as are the Preset up and down arrows in the upper toolbar.

### 6.3.2.4. MIDI channel, CC, and min and max values

The first two columns in every MIDI assignment list the MIDI Channel (**Ch**) and MIDI Continuous Control Change number (**CC**) for the assignment. Up to 16 Channels are available on any MIDI stream, and the 127 possible MIDI Control Change numbers, while freely assignable, follow certain conventions on most instruments. For example, Modulation Wheel is almost always MIDI CC 1, Master Volume is CC 7, and Sustain Pedal is CC 64.

The **Min** and **Max** value columns for each parameter in the list let you scale the amount by which a parameter in CP-70 V changes in response to a physical control movement. For example, you may wish to limit the range of a filter sweep, even though you're probably going to turn the knob all the way during a live performance.

Drag up or down on a value to change it. Setting the maximum lower than the minimum reverses the polarity of the physical controller, i.e. turning it up will turn the assigned parameter *down*.

Switches that only have two positions (On/Off, etc.) would normally be assigned to buttons on your controller, but it's possible to toggle those with a fader or another control if you like.

ג ל Don't forget that many items in the Advanced views (Sequencer, Modulators, and Effects), not just settings on the main panel, may be MIDI Learned.

#### 6.3.2.5. MIDI Parameter Menu

Control-clicking or right-clicking on any item in the list - only the list, not the main interface - of assigned parameters brings up a convenient menu with the following options, which can be different for each parameter.



Right-clicking a parameter gives you these options

- Absolute: The assigned parameter in CP-70 V tracks the literal value your physical controller is sending out.
- **Relative:** The assigned parameter in CP-70 V will go up or down from its current value in response to physical controller movements. This is often useful when using endless 360-degree encoders that don't have physical motion limits.
- **Delete:** Removes the assignment and turns the corresponding onscreen control purple again.
- **Change Parameter:** Brings up a large sub-menu of every assignable parameter in CP-70 V. This lets you change the assignment of the current CC/physical control manually, and is useful when you know exactly the destination you're looking for.

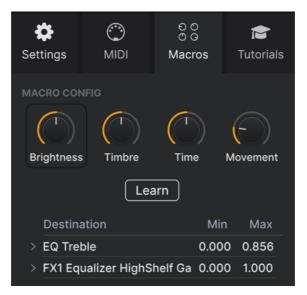
Certain MIDI Continuous Controller (CC) messages are reserved and cannot be reassigned to other controls. These are:

- Pitch Bend
- Aftertouch (Channel Pressure)
- All Notes Off (CC #123)

All other MIDI CC messages may be freely assigned to control any parameter in CP-70 V.

### 6.3.3. Macro Tab

This tab handles assignments for the four Macro knobs on the right side of the Lower Toolbar. You can assign multiple parameters to each one, then use MIDI Learn [p.58] to assign the Macro itself to a physical control if you want.



The Side Panel's Macro Tab



## 6.3.3.1. Macro slots

Click one of the Macro knobs to select which Macros you want to work with. The default names are *Brightness*, *Timbre*, *Time*, and *Movement*, but you can rename them by doubleclicking the name field. The knob above the name corresponds to the knob of the same name in the Lower Toolbar [p.56].

### 6.3.3.2. Making Macros

Click the **Learn** button in the Macro tab and you will see that the process works much like MIDI assignments – available destinations turn purple and ones already assigned turn red. Click on a purple control onscreen and its name will appear on the list.

To remove a parameter from the Macro, right-click its name in the list and select **Delete**. Parameters under Macro control have **Min** and **Max** values and may be scaled by dragging up or down directly on the number, just as is done with MIDI assignments. To reverse the polarity of a parameter (i.e. have it go down when you turn the Macro knob up and viceversa), set the minimum value higher than the maximum.

J You can name and assign parameters as you like to Macros. Keep in mind, though, that clarity is usually better than cleverness when you're working on a track.

#### 6.3.3.3. Macro curves

Beyond simple scaling, you can customize a curve that determines how each parameter under the Macro's control proceeds from its minimum to maximum value and back when you turn the Macro knob. Click the > icon next to the parameter name to open the curve window.



The vertical line corresponds to the position of the Macro knob

Making Macro curves is a lot like working with the Velocity Curve editor [p.19] in CP-70 V. Here, the X-axis represents how much the corresponding Macro knob is turned clockwise, and the Y-axis represents the scale of change to the target parameters. You can set a different curve for every parameter controlled by a Macro.

Click on the curve to add a breakpoint, represented by a small circle. You can then drag the point and the curve segments between it and its nearest neighbors will change accordingly. Right- or control-click on a point to remove it. The first and last breakpoints cannot be removed. (Note that unlike the Modulators, there are no grab handles between the breakpoints.)

## 6.3.4. Tutorials



In this tab, which can also be opened by selecting **Tutorials** from the CP-70 V main menu [p.49], you can click on titles for the individual chapters, which in turn will take you through different areas of CP-70 V in steps. The parts of the panel to focus on are highlighted as you go.

I If you're editing a Preset, make sure to save it before opening the Tutorials, because doing so will load a new Preset and overwrite your changes. The Tutorials also take over the Side Panel space when in use.

① Warning			
Launching tutorial will override your current preset. Make sure you have saved your modifications before continuing.			
	Cancel	Ok	

Warning pop-up when launching a tutorial

# 7. THE PRESET BROWSER

The Preset Browser is how you search, load, and manage sounds in CP-70 V. It can display different views but they all access the same Presets and subgroups of Presets.

To access the browser, click the browser button (the icon looks like books on a library shelf). To close the browser, click the  $\mathbf{X}$  that appears in its place.

The browser has four main areas:

			Definitive CP		
Explore	2 DExplore Q Search P	raeate		Clear All	3 Definitive CP
Sound Ba	ks Types Styles	Banks	User 🖜	33 presets	And and and a state of the stat
♡ Liked	♡ NAME+				
O Red	CP Delay Jam				Versatile sound that perfectly represents this classic instrument. Try turning on the
O Orange	CP Memory				rotating speaker for a cool variation, and play with the tape distortion to add even more "bite". Movement controls tremolo.
O Yellow	Default				MACRO
Green	Definitive CP				
<ul> <li>Purple</li> </ul>	Flanged CP				
ି Gray					
+ Add Playlis	Halls of Eyes				
Gabriel Tribute	Hermato Jam CD				
'80s Cover Ba					

Number	Area	Description
1.	Search and Results [p.67]	Search Presets with text strings, and by tags for Type and Style.
2.	Sidebar [p.71]	Manage Banks, Favorites, and Playlists.
3.	Preset Info [p.73]	Summary of Bank and Tags, Designer name, and description info for current Preset.
4.	Macro Knobs [p.76]	Large size duplicates of Macro knobs in Lower Toolbar and the Macros tab.

# 7.1. Search and Results

Click on the Search field at the top and enter any search term. The browser will filter your search in two ways: First, by matching letters in the Preset name. Then, if your search term is close to that of a Type or Style [p.67] it will include results fitting those tags as well.

The Results list beneath shows all Presets that fit your search. Click the X icon at right to clear your search terms.

Explore	Q piano			Clear All
Турез	Filter By Type Electric Piano			6 presets
♥ NAME-		ТҮРЕ		*
Visionary		Classic EP	Joshua Fielstra	
Halls of Ey	res	Classic EP	Joshua Fielstra	
Lofi Piano		Creative EP	Quentin Feuillard	
Fonky C Fe	onky P	Creative EP	Jerry Kovarsky	
Soft Piano		Creative EP		
Wholesom	e	Classic EP	Joshua Fielstra	

# 7.2. 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. Our extensive range of MIDI controller keyboards also allows you to browse sounds directly from the MIDI keyboard.

# 7.2.1. Types

Types are categories of instruments. You might see bass, leads, strings, pads, organs, and more across other Arturia V Collection instruments. In CP-70 V, the main Type is Electric Piano, with Classic EP and Creative EP subtypes – the latter contains sound designoriented Presets that do not necessarily sound like a CP-70. Then there's a Template type for designing your own Presets. With a clear search bar, click the **Types** button to bring up this list. Notice that each Type may also include subtypes.



Click any one of them, and the results will show only Presets that match that tag. You can also select multiple Types using Cmd-click (macOS) or Ctrl-click (Windows). For example, if you aren't sure whether the Preset you're looking for was tagged with the subtype "Classic EP" or "Creative EP", select both to broaden the search.

Results columns can be sorted and reverse-ordered by clicking the arrow buttons to the right of their titles (Name, Type, Designer).

#### 7.2.2. Styles

Styles refine your search according to further musical attributes. Accessed by the **Styles** button, this area has three further subdivisions:

- *Genres*: Identifiable musical genres such as decades, Trance, Techno, Synthwave, Disco, etc.
- Styles: General "vibe" such as Atmospheric, Dirty, Clean, Complex, Mellow, etc.
- Characteristics: Sonic attributes such as Analog, Evolving, Distorted, Dry, Rise, etc.

	ic X Tribute X Search Presets	Clear All
Types         Styles	Banks	User  Show results (4)
GENRES	STYLES	CHARACTERISTICS
	Airy Atmospheric Dark Deep	Acoustic Delay Long Slow Attack
60s 70s 80s 90s	Warm Mellow Classic Huge	Evolving Processed Tribute Gated
	Punchy Dirty Clean Simple Sa	
Indie Dance Trance World	Soft Harsh Soundscape Bright	Dry Filtered Distorted Noise
Jazz/Blues Modern Pop Rock	Hard Sharp Funky Thin	Leslie) Wah
Soul/R&B Disco Cinematic Lofi		
Psytrance Fusion Grime		
Heavy Metal Industrial Jungle		
(Hip Hop/Trap)		

Click on any tag to select it. Click again (or right-click) on any selected tag to de-select it. Notice that when you select a tag, several other tags usually disappear. This is because the browser is narrowing your search by a process of elimination. De-select any tag to remove that criterion and widen the search without having to start all over again.

#### 7.2.3. Banks

Next to the **Types** and **Styles** buttons is the **Banks** button, which lets you do your search (using all the methods above) within the factory bank or user banks.

# 7.3. Search Results window

Click the **Show Results** button if you cannot already see your list of results. Click the sort arrow to reverse the alphabetical order of any column. You can also click the "hamburger" (three lines) icon next to Show Results. The icon will change to four panes, and you will be able to see the Presets that fit your selected tags, as well as other tags that apply to them, like so:

Explore C 80s × Classic× Tribute× Search Presets							
Турез	Styles	Banks	User	4 presets			
GENRES		STYLES	CHARACTERISTICS				
70s 80s	Jazz/Blues Modern	Classic Clean Harsh Huge	Acoustic Dry Gate	d Natural			
Pop Rock	Soul/R&B	Punchy Simple Warm	Processed Tribute				
		® түре		~\$			
Halls o	f Eyes	Classic EP	Joshua Fielstra				
Hold A	Line	Classic EP	Jerry Kovarsky				
♥ That's	It	Classic EP	Joshua Fielstra				
🕈 Thrivin	g	Classic EP	Joshua Fielstra				

Search results displayed beneath Style tags

#### 7.3.1. Sorting the Preset Order

Explore	Q Search Presets			
Турез	Styles	Banks	User 🔍	33 presets
♥ NAME-	Ø	ТҮРЕ		*

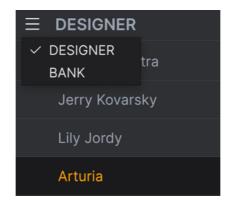
Click the  $\ensuremath{\mathsf{NAME}}$  header in first column of the Results list to sort Presets in ascending or descending alphabetical order.

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

Click the **Arturia logo** to the left of **TYPE** to bring factory-featured Presets to the top of the list. These will appear just under any Presets you have liked [p.70].

Click the User toggle switch to restrict your search to Presets in user banks.

The third column has two header options: **DESIGNER** and **BANK**. Click the icon with three lines to choose between the two. Then click either header name as with the other two columns to switch the alphabetical order.



# 7.3.2. Clearing Tags

Just above the Types, Styles, and Banks buttons, you will see labels for all the active tags in a search. Click the X next to any one to remove it (and thus broaden the results). Click **CLEAR ALL** to remove all tags.



# 7.3.3. Liking Presets

As you explore and create Presets you can mark them as Liked by clicking the **heart** that appears to the left when you hover the mouse over a preset name. Later, click on the heart icon at the top to put all of your favorites at the top of the Results list.

Explore	Q 80s $\times$ Classic $\times$	Search Presets		Clear All
Types	Styles	Banks	User 🔍	16 presets
♥ NAME-	۲	ТҮРЕ		73
<ul> <li>That's It</li> </ul>		Classic EP	Joshua Fielstra	
<ul> <li>Concert C</li> </ul>	P	Classic EP	Jonathan Leonard	
<ul> <li>Thriving</li> </ul>		Classic EP	Joshua Fielstra	
Power CP		Classic EP	Jerry Kovarsky	
🎔 Nu Orlean	ns CP	Classic EP	Jerry Kovarsky	
Nectarous	s	Classic EP	Joshua Fielstra	1



Clicking the "crossed arrows" button randomly reorders the Presets. This can be useful for finding something you like when your search results are a long list that takes time to scroll through – it might bring a killer Preset to the top. Shuffle mode is a toggle, so clicking it again will restore your search results to however they were previously sorted (by name, type, etc.).

Use as many of the sorting and filtering features as you need and you will find the exact sound you want every time.

# 7.4. Sidebar

The leftmost section of the Preset Browser determines what is displayed in the Search and Results [p.67] section.

The topmost option is **Explore**:

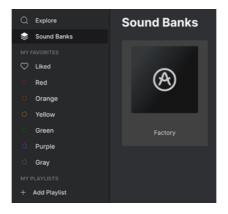
Explore     Sound Banks	Explore Search	Presets		
MY FAVORITES	Types Styles	Banks	User 💷	
♡ Liked	♥ NAME-	TYPE     Second		
O Red	Nu Orleans CP			
O Orange	<ul> <li>Thriving</li> </ul>			
O Yellow	Ambient Ebow			
Green	Soft Plano			
Purple	Fonky C Fonky P			
Oray	<ul> <li>Definitive CP</li> </ul>			
MY PLAYLISTS + Add Playlist	Psychedelic CP			
Gabriel Tribute	This Was It			
'80s Cover Band	Tight Amblence	Classic EP	Jerry Kovarsky	

The **Explore** section is the default, letting you search the current bank of Presets loaded into CP-70 V as we did in the previous section.

## 7.4.1. Sound Banks

Clicking **Sound Banks** brings up a window with all of the currently available Sound Banks, starting with the Factory bank. User banks appear next to it, and can be deleted, renamed, or exported by right-clicking them.

You can also add a user image in PNG format to further personalize your user banks.



## 7.4.2. My Favorites

The middle part of the Sidebar has a menu called **My Favorites**, which allows you to colorcode certain groups of Presets for easy access. It also includes the **Liked** group, so you can quickly find Presets you've marked with the heart icon.

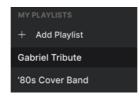
To decide which colors you'd like to display, hover over **My Favorites** and click **Edit**. Then use the toggle switches to select which colors you'd like to see or hide, and then click **Done**.

Please note that you can also rename these favorites as desired. Just right-click on the color name in the sidebar and enter a new name.

$^{\circ}$	Liked	•	NAME-	۲	ТҮРЕ	Ξ	DESIGNER	≍
	Red		Hold A Line					
	Orange	•	Long Way Road					
	Yellow		Nu Orleans CP		Classic EP		Jerry Kovarsky	
	Green		Sunrise					
	Purple Gray		Ambient Ebow					
	Gray							

To add Presets to a particular set of Favorites, simply drag-and-drop them over the appropriate color, or right-click the Preset name and select the color. Then click on the color itself to display your grouping.

## 7.4.3. My Playlists

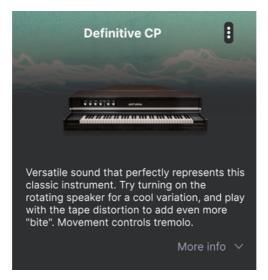


The bottom part of the sidebar displays any Playlists you have created or imported. Playlists are a very powerful management tool for set lists for gigs. Learn more about them in the Playlists section [p.77] below.

I If you don't see anything here, it is because you haven't created any Playlists yet. Head to the Playlists [p.77] section at the end of this chapter to find out how.

# 7.5. Preset Info Section

The right side of the browser window gives a brief description of each Preset.



For user Presets (not factory Presets) you can edit this description by simply clicking in it and typing. Then, click "More info" at the bottom right of this screen to open up an area you can scroll down to:



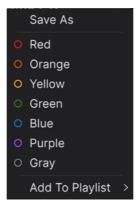
Here, you can change the Type and Bank via pull-down menus, enter a Designer name, and click the + sign to add or delete Styles. When you click this icon, the results area is occupied by an edit list in which you can select and deselect Styles, Genres, and Characteristics:

EDIT STYI	LE
STYLES	
	Atmospheric Bizarre Bright Classic Clean Complex Dark Deep Dirty Funky Hard Harsh Huge lelodic <u>Punchy</u> Sad Sharp <u>Simple</u> Soft Soundscape Thin Warm +
GENRES	
60s 70s	80s 90s Ambient Bass Music Berlin Breakbeat Chiptune Cinematic Classical Detroit Disco
Downtempo	o Drum & Bass Dub/Reggae Dubstep Electro Experimental Footwork Funk Fusion Future Bass
Game Audio	o Grime Hard Techno Heavy Metal Hip Hop/Trap House IDM Indie Dance Industrial Jazz/Blues Jungle
Latin Lofi	i Minimal Modern Pop Psytrance Reggaeton Rock Soul/R&B Soundtrack Synthwave Techno Trance
	Tropical House UK Garage World +
CHARACTE	
	+ Acoustic Additive Amp Analog Arpeggiated Chord Delay Digital Distorted Dry Ensemble
Evolving F	Filtered FM Gated Glide Glitch Granular Hoover Hybrid Layered Leslie Long Multi/Split Natural
Noise Phr	rases Processed Random Reese Reverb Reversed Rise Sample-based Sequence/Loop Short
Slow Attack	k Solo Stab Synced Synth Transient Tribute Vibrato Wah +

Notice that each group has its own + icon at the end. Clicking this lets you create your own Styles, Genres, or Characteristics. Click the X at upper right when finished editing.

Type and Style changes you make here are reflected in searches. For example, if you remove the "Acoustic" Style tag and then save that Preset, it will not show up in future searches for Acoustic sounds. Again, all of this is possible only with user Presets.

Clicking on the three-dots icon at the top right pops up a management menu for the Preset.



Options include *Save, Save As, Delete Preset,* and *Add to Playlist,* complete with an option to create a new Playlist [p.77]. (You cannot overwrite or delete factory Presets, so the Save and Delete options appear for user Presets only.)

The dots with color icons allow you to add the Preset to a particular group of Favorites, which is described above.

## 7.5.1. Editing info for multiple presets

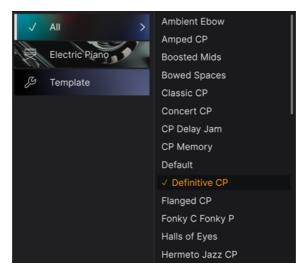
If you'd like to move several Presets to a different bank while preparing for a performance, or enter a single comment for several Presets at the same time, it's easy to do. Simply hold command (macOS) or ctrl (Windows) and click the names of the Presets you want to change in the Results list. Then enter the comments, change the Bank or Type, etc., and save the Preset.

Exp	Ore C Search Prese	ts				
Турез	s Styles		Banks	User	•	33 presets
۰	NAME-	۲	ТҮРЕ		DESIGNER	23
	Nu Orleans CP		Classic EP		Jerry Kovarsky	
•	Thriving		Classic EP		Joshua Fielstra	
	Ambient Ebow		Creative EP		Quentin Feuillard	
	Soft Piano		Creative EP		Arturia	
	Fonky C Fonky P		Creative EP		Jerry Kovarsky	
•	Definitive CP	0	Classic EP		Jerry Kovarsky	
	Psychedelic CP		Creative EP		Jerry Kovarsky	

J If you want to alter the information for a Factory Preset you must first use the Save As command to re-save it as a User Preset.

## 7.6. Preset selection: other methods

Click on the Preset name in the center of the Upper Toolbar to bring up a drop-down menu. The first option in this menu is *All*, and it brings up a submenu of literally every Preset in the current bank, in alphabetical order.



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

If you have an active search by Type and/or Style, the up/down arrows to the right of the Preset name will step through only the results that conform to your search.

However, *All Presets* in the drop-down menu always ignores those criteria. Likewise for the Type choices below the line – they always include all Presets within that Type.

# 7.7. Macro Knobs

These are simply larger duplicates of the Macro knobs in the Lower Toolbar and on the Macros tab. Move one, and its counterparts in Side Panel and Lower Toolbar move with it.



Assigning parameters to Macros is covered in the Macro Tab [p.63] section of Chapter 6.

# 7.8. Playlists

MY PLAYLISTS
+ Add Playlist
'80s Cover Band
Gabriel Tribute

Playlists offer a powerful way to collect Presets into different groups for different purposes, such as a set list for a particular performance or a batch of Presets related to a particular studio project. Within a Playlist, Presets can be reordered and grouped into Songs, a handy addition to a set list.

The subheading *My Playlists* appears under **My Favorites** in the Sidebar. When you first start using CP-70 V, you'll have no Playlists yet – but it's very easy to create one!

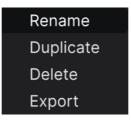
## 7.8.1. Create your first Playlist

To get started, click **Add Playlist**. The following pop-up will appear, prompting you to name your Playlist.



Once you've entered a name, that Playlist will now appear in the **My Playlists** section of the sidebar. You can create as many Playlists as you like.

Right-clicking on a Playlist name will pop up a set of options - you can *Rename, Duplicate, Delete,* or *Export* the Playlist to your computer, as a file with the ".aplst" extension.



#### 7.8.2. Add a Preset

You can use all of the options in the Explore window to locate Presets for your Playlist. When you find a desired Preset, click-drag it onto the Playlist name.

O Yellow	٠	Pwrcords	Creative EP	Jerry Kovarsky
Green		Ambient Ebow	Creative EP	Quentin Feuillard
Purple		Hold A Line		Jerry Kovarsky
Gray		Classic CP		Jonathan Leonard
+ Add Playlist	٠	Definitive CP		Jerry Kovarsky
Gabriel Tribute 🛌 Ambient Ebor		Lofi Plano		Quentin Feuillard
'80s Cover Band		Sunrise	Classic EP	Quentin Feuillard

Dragging a preset to a Playlist

To view the contents of a Playlist, click on the Playlist name.

#### 7.8.3. Re-order the Presets

Presets may be reorganized within a Playlist. For example, to move a Preset from slot 3 to slot 4, drag and drop the Preset to the desired location.

4.5	over Band st updated on 25/11/2023 - 14:21 g :	
Ne M'Oublie Pas		
1 Definitive CP	Electric Piano	
2 Amped CP	Electric Piano	
3 Halls of Eyes	Electric Piano	
4 Tight Ambience	Electric Piano	
Pluie Rouge		
1 Fonky C Fonky P	2 Amped CP Electric Piano Electric Piano	
2 Radio Star	Electric Piano	

This will move other Presets up in the list to accommodate the new location of the Preset you just moved. A bright purple line will briefly appear at the "insert point."

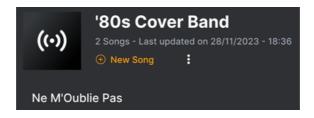
#### 7.8.4. Remove a Preset

To delete a Preset from a playlist, select the Playlist, then right-click on the Presets name in the Results Pane to bring up a pop-up menu. This will only delete the Preset from the Playlist, not delete the Preset from the CP-70 V browser!

Ne M'Oublie Pas	;	
1 Definitive CP	Electric Piano	
2 Halls of Eyes		Electric Piano
3 Tight Ambience	Rename	Electric Piano
Pluie Rouge	Copy Paste	
1 Fonky C Fonky P	Delete Duplicate	Electric Piano
2 Amped CP		Electric Piano
3 Radio Star		Electric Piano

This menu also includes **Rename, Copy**, **Paste**, and **Duplicate** options. More management options are described below.

#### 7.8.5. Song and Playlist Management



Any Playlist can be further divided into Songs, which is ideal for managing set lists for a live show. The **New Song** button creates a new Song at the bottom of the Playlist. You can name it, then click and drag it to position it in the Playlist and add Presets to it in the desired order. You can have multiple songs in each Playlist, and when dragging a song by its title, it brings all its Playlists with it – in order!

To access other Playlist management options, click on the three-dots icon next to the **New Song** button. This brings up a pull-down menu:

Rename Playlist
Save Playlist As
Export Playlist
Delete Playlist

- Rename Playlist: Renames the current Playlist without making a copy.
- Save Playlist As: Creates a duplicate of the playlist with "Copy" appended to the name. You can change the name before saving.

- Export Playlist: Exports your Playlist to a location on your computer, with the filename extension "aplst."
- **Delete Playlist**: Deletes the current Playlist but does *not* delete any of the Presets in it.

That's all there is to the Preset Browser! We hope you will enjoy many hours exploring the factory Presets and creating your own.

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