

## Doors - Left Hand Bass V1

Doors left hand Keyboard chain based on Sampleson FirePiano and the following Effects : Radiator - MF107S Freq Box - MF-101S filter - UA 1176. What are the details parameters for each effect

### Effect Chain Settings - Summary

Here is your master signal flow for the "Manzarek Piano Bass" template. This chain turns the Sampleson FirePiano into a heavy, woody, 1960s foundation.

#### Source: Sampleson FirePiano

- Preset: Dark Rhodes / No Tone.
- Goal: Provide the "mechanical" mid-range strike.

#### 1. Soundtoys Radiator (The "60s Console")

- Input: +4 to +6 (Aim for a Green/Yellow LED).
- Bass: +2 | Treble: -3 (Darkens the piano).
- Output: Adjust to feed the next plugin without clipping.
- Logic: Adds the "woody" harmonic saturation and tube warmth.

#### 2. Moogerfooger MF-107S Freq Box (The "Sub-Weight")

- Drive: 12:00 (Center).
- Sync: ON (Crucial for pitch tracking).
- Freq: 9:00 to 10:00 (Tuned to the sub-octave).
- Wave: Triangle (Smooth low-end).
- Mix: 9:00 (20%) (Subtle reinforcement).
- CV Connection: Envelope Out (MF-101S) → Freq In (Set to +10%) for a percussive "knock" on the attack.

#### 3. Moogerfooger MF-101S Filter (The "Sculptor")

- Drive: 12:00 (Center).
- Cutoff: 150Hz - 250Hz (Muffles the "piano" and highlights the "bass").
- Resonance: 3 to 4 (Adds "thump" and definition).
- Pole: 4-Pole (Steeper, darker slope).
- Smooth/Fast: FAST (Ensures the filter reacts to quick walking lines).
- Env. Amount: +2:00 (Triggers the "pluck" via internal CV).

#### 4. UA 1176 Compressor (The "Glue")

- Ratio: 4:1.
- Attack: 3 to 4 (Slow enough to let the filter "pluck" through).
- Release: 6 (Fast) for uptempo songs; 4 (Medium) for moody ballads.
- Input: Adjust for 3-7dB of gain reduction.
- Output: Final volume leveling.

### Final Performance Tip:

If the bass sounds too "synthy," lower the Mix on the Freq Box. If it sounds too much like a standard piano, lower the Cutoff on the MF-101S.

## Detailed Instrument & Effect Setup and Logic

### Effect Chain Overview

To achieve the signature Doors Piano Bass sound (Ray Manzarek style) using your specific chain, the goal is to create a "woody," percussive low-end that is consistently leveled and slightly overdriven.

#### 1. Sampleson FirePiano

- Start with a "dark" Rhodes setting.
- Color/Timbre: Dial back the "Tines" or high-frequency bell content. You want the "Bark" (mid-range growl) without the sparkling highs.
- Velocity: Adjust the velocity curve so you can hit the keys hard to get that mechanical "thump" without it becoming too thin.

#### 2. Soundtoys Radiator

This provides the vintage tube preamp saturation typical of 1960s recording consoles.

- Input: Push until you hear a slight "grit" when playing hard.
- Bass/Treble: Boost the Bass slightly to add weight; keep Treble at 12:00 or slightly cut to maintain a "darker" tone.
- Mix: 100% Wet.

#### 3. Moogerfooger MF-107S Freq Box

Use this to add a subtle "synth-like" fundamental layer to the piano bass.

- Frequency: Tune it to match the pitch of your notes (Hard Sync ON is essential here).
- Mix: Set very low (around 10-20%). You want to feel the extra low-end weight without explicitly hearing a second synth voice.
- Waveform: Square or Triangle for a hollow, bassy reinforcement.

#### 4. Moogerfooger MF-101S Filter

This is the "tonal shaper" that makes it sound like a dedicated bass instrument.

- Drive: Set to 12:00 (Unity).
- Cutoff: Set low (around 150Hz - 300Hz) to roll off the "piano" highs and leave only the "bass".
- Resonance: 2-4. Adding a little resonance at the cutoff frequency can give the bass a "punchy" peak that helps it cut through.
- Envelope Amount: 0 (Center). For the Doors sound, you usually want a static, solid filter rather than a "wah" effect.

#### 5. UA 1176 Compressor

Final leveling to ensure every bass note has the same impact.

- Ratio: 4:1 (Standard for bass) or 8:1 if you want more "squeeze".
- Attack: 3 or 4 (Medium-Slow). This allows the initial "line" strike to pass through before the compressor clamps down, preserving the percussive "thump".
- Release: 5 or 6 (Fast). This ensures the compressor resets quickly for the next note in a walking bass line.
- Input: Adjust until you see 3-7dB of gain reduction on the meter.

### Setup Details for each Effect

lets go the effects one by one and look at the detail settings and the logic behind the settings: Starting with the Radiator

#### Soundtoys Radiator

To get that Ray Manzarek "Piano Bass" sound, the Radiator acts as your "virtual console." It mimics the Altec 1567A mixer, which was a staple in 60s studios for adding warmth and "glue."

#### Radiator: The "60s Grit" Stage

Parameter	Recommended Setting	Logic & Goal
Input	+2 to +4 (Dial to taste)	This is your primary "character" control. You want to push the signal until it loses its digital "cleanness." This adds harmonic saturation, making the low-end feel more "woody" and solid.
Bass	+2 to +3	The Doors' bass sound needs weight. Boosting here adds a vintage, pillowy low-end that makes the Sampleson feel less like a piano and more like a dedicated bass instrument.
Treble	-2 to -4	Crucial: You need to roll off the "tine" brightness. Ray's bass was often muddy and dark to stay out of the way of his right-hand Vox Continental/Gibson organ parts.
Output	Adjust for Unity	Compensate so your volume doesn't jump too high when you engage the plugin. Keep the meter peaking around 0.
Mic/Line Switch	Mic	The Mic setting provides more gain and a more aggressive saturation curve. Use this if the "Line" setting feels too subtle for the "bark" you want.

#### The Logic behind starting with Radiator:

In a real 60s signal chain, the instrument hits the preamp/mixer first. By putting Radiator before the filters (Freq Box/MF-101), you are saturating the full frequency spectrum of the piano. This creates extra harmonics that the MF-101 Filter can then "chev on" later in the chain. If you put it at the end, the saturation would be much thinner because the filter has already removed the high-frequency content. Check the "Input" level on the Radiator affecting the "Drive" LED on your next plugin, the MF-107S Freq Box. You'll want to make sure the Radiator isn't clipping the Freq Box input too hard.

#### Moogerfooger MF-107 Freq-Box

Next in your chain is the MF-107S Freq Box. This is the most "dangerous" part of the chain because it can easily sound like a sci-fi movie instead of a 60s bass if not dialed in carefully.

#### MF-107S Freq Box: The "Weight" Stage

The logic here is Oscillator Sync. We want the Freq Box to "track" your piano notes and add a thick, analog sub-layer.

Parameter	Recommended Setting	Logic & Goal
Drive	12:00 (Center)	Since your Radiator is already hitting green, keep this at 4-5 (unity) to maintain a clean hand-off to the oscillator. [3, 9]
Sync	ON	Essential. This forces the internal oscillator to start its cycle every time the piano hits a note, ensuring the "bass" is perfectly in tune with your left hand.
Freq	Adjust to Pitch	Turn this until the oscillator matches the "octave" of your bass notes. If it sounds "metallic," you are between pitches.
Wave	Triangle (Halfway)	Triangle is smoother and "bassier" than Sawtooth. It adds the "sub" weight Ray Manzarek's Rhodes Piano Bass was famous for.
Mix	9:00 (Low)	You only want about 15-20% of this effect. It should be felt more than heard—like a "sub-woofer" for your piano.
Env. Amount	0 (Center)	Keep this off. We want a solid, consistent bass tone, not a sweeping synth sound.
FM Amount	0 (1 for a bit wobble)	For a Doors-style bass, you want the FM Amount at 0 (Fully Counter-Clockwise)

The Logic: The Freq Box acts as a "reinforcement." By syncing a Triangle wave to your piano, you transform a percussive piano strike into a sustained, "woody" bass note.

#### The Logic behind FM Amount

Frequency Modulation (FM) uses the piano's signal to "wobble" the pitch of the Freq Box oscillator. While cool for sound design, it creates metallic, "clanging" textures that will destroy the solid, walking-bass foundation you need for a Ray Manzarek vibe. You want the oscillator to be a steady, rock-solid sub-layer, not a vibrating mess.

#### Starting Points for "Freq" (The Tuning)

The Freq knob is the most sensitive control on the MF-107S. Since you have Sync ON, the knob doesn't change the pitch (the piano does that), but it changes the timbre and octave reinforcement.

- The "Sub" Sweet Spot (approx. 9:00 - 10:00):
  - Goal: To add a deep, foundational "thud" below the piano note.
  - How to tune: Play your lowest bass note. Turn the Freq knob until you feel the low-end "bloom." If it sounds like a growl, you're too low; if it sounds like a whistle, you're too high.
- The "Woody" Sweet Spot (approx. 11:00 - 1:00):
  - Goal: To emphasize the "bark" or the mid-range of the bass.
  - How to tune: This creates a more "hollow" 60s sound that cuts through a mix, mimicking the resonant box of the original Rhodes Piano Bass.

#### Quick Tip for Tuning:

Temporarily turn the Mix to 100% (All Freq Box) and the Drive up slightly so you can hear exactly what the oscillator is doing. Once the "Freq" sounds like a solid, clean bass tone that follows your keyboard, pull the Mix back down to 9:00 so it blends into the background.

#### Moogerfooger MF-101S Filter

The MF-101S Lowpass Filter is where you blend the piano and the sub-oscillator into a single, cohesive "Doors" bass tone. Its job is to remove the "piano" character and leave the "bass" weight.

#### MF-101S: The "Sculpting" Stage

Parameter	Recommended Setting	Logic & Goal
Drive	12:00 (Center)	As established, this is Unity Gain. Since your signal is already "green" from the previous steps, keep it here to avoid clipping the filter internally.
Cutoff	Approx. 150Hz - 300Hz	This is the "Door-maker." By setting it low, you roll off the percussive "tine" highs of the FirePiano, leaving the warm, "woody" fundamental that Ray Manzarek favored.
Resonance	2 to 4	A small amount of resonance creates a slight "bump" at the cutoff frequency. This adds definition and punch to each note so the bass doesn't just disappear into a muddy hum.
2-Pole / 4-Pole	4-Pole (24dB/oct)	The 4-pole setting is the "classic Moog" sound. It has a steeper slope, which is better for isolating the bass frequencies and creating a darker, "muffled" tone.
Env. Amount	0 (Center)	Keep this off. For a walking bass line, you want a consistent tone. You don't want the filter opening and closing (the "wah" effect) every time you hit a note.
Mix	100% Wet	You want the entire signal (Piano + Freq Box) to be processed by this filter to ensure they sound like one single instrument.

#### The Logic:

Creating the "Pillowy" Low End  
By placing the MF-101S after the Freq Box, you are "gluing" the synth sub-oscillator and the piano together. The filter treats them as a single sound source, smoothing out any harsh edges from the Radiator's distortion or the Freq Box's raw waveform

#### Using Moogerfooger CV Controls

In the Moogerfooger plugin suite, CV (Control Voltage) allows one pedal to "play" the other. For a Doors-style Piano Bass, the most effective use of CV is to have the Envelope of your playing control the Filter Cutoff or the Freq Box tuning.

Here are the two best ways to connect them for your specific chain:

#### Option 1: The "Dynamic Punch" (Envelope Out → Cutoff In)

This is the most "musical" connection. It uses the volume of your playing to momentarily open the filter.

- The Connection: Open the back panel for CV mapping and route the MF-101S Envelope Out to the MF-101S Cutoff In.
- The Setting: Set the Env. Amount knob on the MF-101S slightly positive (2 o'clock).
- The Result: When you hit a bass note harder, the filter opens slightly, adding a "pluck" or "thump" to the start of the note. When you play softly, it stays dark and muffled. This mimics the physical response of a real Rhodes Piano Bass hammer.

#### Option 2: The "Growl" (Envelope Out → Freq In)

This makes the sub-oscillator from the Freq Box react to your touch.

- The Connection: Route the MF-101S Envelope Out to the MF-107S Freq In.
- The Setting: Keep the CV amount very low.
- The Result: The pitch of the Freq Box will "chirp" or "frown" slightly at the beginning of the note before settling into the pitch. This adds a "mechanical" quality to the sound, making it feel less like a digital sample and more like a physical instrument vibrating.

#### Implement Option 1:

Option 1 focuses on the MF-101S Lowpass Filter to create a dynamic, touch-sensitive "pluck" for your bass notes. By routing the pedal's own envelope to its cutoff, the filter "jumps" open every time you strike a key, then quickly settles back into the dark, woody tone characteristic of the Doors.

To implement this, you will use the CV (Control Voltage) panel on the MF-101S.

#### The CV Routing

In the plugin's CV settings (accessible via the "back panel" or the CV button at the top):

- Source: Select Envelope Out.
- Destination: Select Cutoff In.
- Amount: Set to approximately +10% to +20%.

#### Knob Settings on the MF-101S

Parameter	Setting	Logic
Cutoff	Approx. 150Hz	Set this lower than usual. This is your "resting" tone—dark and muffled.
Env. Amount	2:00 (Positive)	This determines how much the "strike" of your note pushes the filter open.
Smooth/Fast	Fast	Essential for bass. You want the filter to react instantly to your finger strike to get that percussive "knock."
Resonance	3 to 5	High resonance makes the "sweep" of the pluck more audible and "rubbery," helping it cut through the mix.

#### The Logic behind the implementation

- The "Thump": Because the Cutoff is set very low, the bass is normally very dark. When you hit a key, the Envelope Out sends a sudden burst of energy to the Cutoff In, momentarily "opening" the filter. This creates a bright, sharp attack—the "pluck"—before it immediately returns to the dark bass tone as the note decays.
- Dynamic Response: The harder you play, the "brighter" the initial thump becomes. This gives your left hand the same expressive range as a real mechanical instrument.

#### Interaction with the Chain

Since this creates a larger volume peak at the start of every note, your UA 1176 (the next plugin in your chain) will have to work a bit harder. Ensure the 1176 Attack is not set to its fastest position (keep it around 3 or 4) so it doesn't kill the "pluck" you just created before it has a chance to be heard.

Would you like to know how to adjust the Smooth/Fast switch on the MF-101S to better match the tempo of your bass lines?

#### Implement Option 2

To implement Option 2 (Envelope Out → Freq In) effectively for a "Doors" vibe, you need to be very subtle. The goal is to create a "mechanical knock" or "pluck" at the start of the note, rather than a "wow" synth sweep.

Here are the specific adjustments to make this CV connection work with your existing settings:

#### 1. MF-107S (Freq Box) Adjustments

Since the Envelope is now "pushing" the Freq knob, the resulting position of the Freq knob needs to be slightly lower to compensate for the "jump" when you hit a key.

- Freq Knob: Lower it slightly from your previous "Sweet Spot" (about 1/2 an hour counter-clockwise).
- FM Amount: Keep this at 0. You want the Envelope to move the pitch, not the audio signal.
- Sync: Must remain ON. This ensures that even though the envelope is "tugging" at the frequency, the oscillator remains locked to the piano's pitch once the initial strike is over.

#### 2. MF-101S (Filter) Adjustments

This pedal is now acting as the "Controller." Its Envelope Follower is reading your playing dynamics and sending that "energy" to the Freq Box.

- Env. Amount: On the MF-101S, keep this at 0 (unless you want the filter to move too). The CV signal is sent from the "Envelope Out" regardless of where this knob is set.
- Drive: Ensure this is still hitting Green/Yellow. If the Drive is too low, the Envelope signal will be too weak to "move" the Freq Box.

#### 3. The CV Mapping (The "Secret Sauce")

In the digital side-panel or the CV cable routing:

- CV Amount (Polarity): Set this to a Positive value, but keep it very low (around 10-15%).
- The Logic: When you hit a note hard, the Freq Box oscillator will momentarily "jump" up in frequency and then immediately "settle" into the note as the piano's volume decays. This mimics the sound of a physical hammer hitting a metal tine, giving you that percussive "knock" Ray Manzarek's Piano Bass had.

#### Smith / Fast Switch Adjustments

The Smooth/Fast switch on the MF-101S determines how quickly the Envelope Follower tracks the volume of your playing. For a Doors-style left-hand bass, this is the difference between a "mushy" response and a "punchy" one.

#### 1. Fast Setting (Recommended)

- The Action: The filter follows the instantaneous "snap" of your finger hitting the key.
- The Sound: You get a sharp, percussive "Click" or "Thump" at the start of every note.
- Why use it here: Ray Manzarek's Piano Bass was essentially a mechanical instrument. The Fast setting mimics the physical hammer strike. It is perfect for driving, rhythmic walking bass lines where you need each note to have a clear beginning.

#### 2. Smooth Setting

- The Action: The filter rounds off the attack and slows down the release of the envelope. It takes a few milliseconds to "bloom."
- The Sound: A more "Rubbery" or "Liquid" feel. Instead of a sharp attack, the filter swells in slightly.
- Why avoid it for this chain: In a fast bass line, "Smooth" can't reset quickly enough between notes. The filter stays partially open, causing the notes to bleed together and lose that distinct, woody definition.

#### The Tempo Connection

- Fast Tempos (e.g., "Break On Through"): Use Fast. If you use Smooth at high speeds, the envelope never has time to "fall," and your filter will just stay open, making the bass sound too bright and thin.
- Slow, Moody Ballads (e.g., "The End"): You could experiment with Smooth here if you want the bass to feel more like a bowed double bass or a soft synth pad, but for 90% of The Doors' catalog, Fast is the correct choice.

#### Pro-Tip for the CV Connection:

If you are using Option 1 (Env → Cutoff), the Fast switch makes the CV signal a "spike" of energy. If the "spike" feels too sticky or pops too hard, don't switch to Smooth—instead, slightly lower the Env. Amount knob. This keeps the speed but reduces the intensity.

## UA 1176

In a Doors-style chain, the UA 1176 isn't just for volume; it's the "glue" that forces the Sampleson FirePiano and the MF-107S Freq Box to sound like a single, solid instrument. It captures that "pushed" sound of a 1960s tracking session.

#### UA 1176: The "Solidify" Stage

Parameter	Recommended Setting	Logic & Goal
Ratio	4:1	This is the "musical" setting. It provides firm control without the aggressive "pumping" of higher ratios, keeping the walking bass line steady.
Attack	Position 3 to 4	Important: Set this to medium-slow. This allows the "thump" you created with the MF-101S filter pluck to pass through before the compressor clamps down.
Release	Position 5 to 7 (Fast)	You want the needle to jump back to zero quickly between notes. If the release is too slow, the compressor stays "squeezed," and your next bass note will sound muffled.
Input	Adjust for 3-7dB	Turn the Input up until the needle bounces consistently between -3 and -7 on the gain reduction meter during average playing.
Output	Makeup Gain	Use this to bring the overall volume back up to a comfortable level for your mix.

#### The Logic: Why the 1176?

- The 1176 is a FET compressor, known for its extremely fast reaction time and "colorful" saturation.
- The "Woody" Finish: By compressing the low-end, it brings up the "tail" of the notes, making the bass feel more sustained and "electric."
- Controlling the CV Pluck: Since you are using Option 1 (the filter pluck), some notes might jump out too much. The 1176 "shaves" those peaks off, ensuring you don't clip your digital output while keeping the perceived energy high.

#### Pro-Tip: "All-Buttons-In" (British Mode)?

For a standard Doors sound, avoid the "All-Buttons-In" mode. It adds too much distortion and "pumping" for a foundational bass part. Stick to 4:1 to keep the groove sophisticated and clean.

## Special Adjustments - More Growl

If you need more "growl" to match that aggressive Morrison Hotel era bite, we need to revisit the Radiator while keeping an eye on the rest of the chain so the sound doesn't fall apart.

#### 1. Pushing the Radiator (The "Bark")

To get more growl without just getting "loud," we do this by leveling the LED to flicker:

- Input: Crank this toward +6 or +8. You want the Change LED to staying red on your hardest hits. This creates the "square-wave" saturation that gives the piano bass its "mean" character.
- Output: CRITICAL. As you turn input up, turn the Output knob down. You must keep the signal hitting the MF-107S Freq Box at a "Green" level, or the Freq Box will lose its ability to track your pitch accurately.

#### 2. The Interaction with the Freq Box

Because you are now sending a "dirtier" signal into the Freq Box:

- Sync: Since the signal is more distorted (complex harmonics), the Sync might struggle. If the pitch starts "jittering," back off the Radiator Input slightly.
- Mix: You can actually turn the Freq Box Mix UP to about 10:00. A distorted piano loves a clean sub-oscillator to keep it from sounding "thin."

#### 3. The "Filter-Drive" Trick (MF-101S)

Remember our first conversation about the Drive 4-5?

- If the Radiator growl isn't enough, push the MF-101S Drive to 6 or 7 (approx. 2:00).
- Logic: This overdrives the Moog filter's internal "ladder" circuit. It's a smoother, creamier distortion than the Radiator's tube grit. Combining both gives you a massive, "expensive" sounding 60s bass tone.

#### 4. Re-Adjusting the 1176

More growl means more harmonics, which the 1176 loves.

- Attack: Move it slightly faster (toward 5). Distorted signals have "messier" peaks; a faster attack will clamp down on that fizz and keep the bass sounding "tight" and professional.

The Final Result: You should now have a bass tone that "barks" when you dig in with your left hand but stays deep and supportive when you play softly.

Would you like a summary of the final signal flow to save as a master preset, or should we tweak the 1176's Release to better match a specific Doors track's tempo?

## Special Adjustments - 1176 Release

To dial in the 1176 Release for that specific "walking" left-hand feel, you need to match the compressor's recovery time to the tempo and note length of the song.

On a UA 1176, 7 is the Fastest and 1 is the Slowest.

#### 1. The "Standard" Doors Groove (Release at 5-6)

- The Vibe: Songs like "Light My Fire" or "Break On Through"
- The Logic: You want the needle to "snap" back to zero almost immediately after the note is released. This ensures the compressor is fully reset and ready to "grab" the next percussive piano strike.

#### 2. The "Slow & Swampy" Groove (Release at 3-4)

- The Vibe: Songs like "Riders on the Storm" or "The End."
- The Logic: By slowing the release, the compressor stays "clamped" a bit longer. This smooths out the transitions between notes.

• Output: CRITICAL. It creates a thick, sustained low-end. The "growl" from your Radiator and the sub from the Freq Box will feel more "glued" together into a continuous, pulsating wall of sound.

#### 3. The "Pumping" Danger Zone (Release at 7)

- The Warning: If you set the release to 7 (Fastest), the compressor might recover so quickly that it creates a "breathing" or "pumping" effect.
- The Fix: If you hear the background noise or the "tail" of the piano note jumping up in volume unnaturally, back the release down to 5.

#### How to "Tune" the Release by Ear:

- Watch the Gain Reduction meter.
- Play your intended bass line at tempo.
- Adjust the Release until the needle just hits 0 right before you strike the next note.

- If it hits 0 too early, the bass sounds "disconnected."
- If it never reaches 0, the bass sounds "choke" and loses its 60s power.

**Final Summary:** Use 6 for fast tracks and 4 for moody tracks.