



User Manual
Bass Amp Room

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Softube User Manual

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Disclaimer

Every effort has been made to ensure that the information in this manual is accurate. However, there is a chance that we have made mistakes, and we hope that you understand that we are only humans. Please let us know about the mistake, and we'll fix it in the mix (or in the next version of this manual).

Support

On the Softube website (www.softube.com) you will find answers to common questions (FAQ) and other topics that might interest you.

Support questions can be posted at <http://www.softube.com>, where we will help you as fast as we can!

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1 User Interface

SOFTUBE PLUG-INS ARE “what you see is what you get” products. You should be able to intuitively learn the products within minutes, so that you can work fast and efficient with them. There are a couple of things that remain the same for all of our plug-ins, such as the menu row. These will be explained in this chapter. For detailed information of a particular plug-in, please see its chapter.

Menu Row

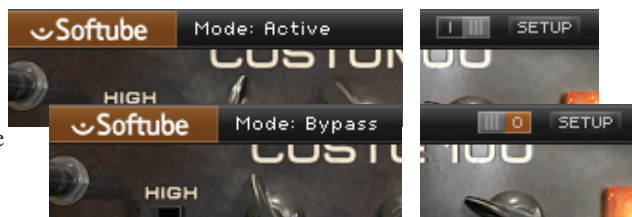
In the bottom of the plug-in interface, you will see a thin black row with some buttons. We’ll use the Dyna-mite plug-in as example, but the same goes for all plug-ins.

About Box Opens the “About” Box with version info.

Value Display Displays the knob value when the mouse is hovering over a control.

Enable Enable/Activate the plug-in.
Set to OFF for bypass.

Setup Changes global options for all instances of that plug-in.



Enable

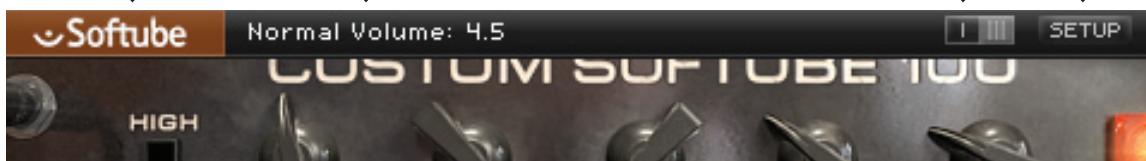
When the **Enable** switch is set to ON (I), the plug-in is active and will process audio. When set to OFF (O), it will be bypassed and not process any audio. It will take considerably less CPU when it is bypassed.

“About” Box

Value Display

Enable

Setup



Setup

In the Setup window you can change settings that will affect all instances of that particular plug-in. If you for example de-select the “Show Value Display” option in the Bass Amp Room plug-in the value display will be off for all Bass Amp Rooms on your system until you select that option again.

The different options vary between Windows and Mac, and also different formats and plug-ins. The most common options are:

SHOW VALUE DISPLAY: Enables the parameter and value display in the bottom row of the plug-in.

REVERSE MOUSE WHEEL DIRECTION: (Mac OS Only) Changes if the a knob is turned up or down when the mouse wheel is turned up or down. (*Mac OS Only*)

You need to restart your host software (DAW) before the changes to fully take effect!

If you messed something up and manually need to set these options, you’ll find them in text format in the following locations:

MAC OS: ~/Library/Application Support/Softube

WINDOWS: username\Application Data\

Key Commands

All numbers and labels in the plug-in are clickable. This allows you to easy select a setting by clicking on the wanted value. Hovering above a label will turn the mouse pointer into a pointing hand.

Mouse

Up/Down or Mouse Wheel Change a parameter, such as a knob or a switch.

Keyboard

Fine Adjust ⌘ (Mac) or CTRL (Win), while changing the parameter value.

Reset to Default ALT, while clicking on the knob or fader.

Plug-In Specific Key Commands

In many plug-ins, you can SHIFT-click on a knob or a switch to get some extra functionality

Metal Amp Room

SHIFT-click and drag a mic will move both mics simultaneously.

All Amp Rooms

SHIFT-click in the cabinet background will change cabinet (or amp) without any animations

2 Bass Amp Room

Introduction

WHEN WE DESIGNED BASS AMP ROOM we had two goals in mind. The first goal was to give the user the best possible sound quality and state-of-the-art physical modeling. The other, equally important goal was to give the user a plugin that was intuitive and allowed for a really fast work flow. Time is money, but cutting down on time shouldn't have to mean that you need to accept poor results. At least not with Bass Amp Room. And having an amp model that behaves just like the real thing will definitely speed up the work process, since you probably already know how to use it.

In short, you need the same skills to master this software as you need when dealing with the real studio setup. You can get back to doing what you do best, because music production should be about using your ears, not your computer skills.

WE HAVE IMAGINED TWO TYPES OF USERS. The first wants the best possible amp modeling and is willing to spend time tweaking the sound of each bass track. By working the mics, amp and D.I. tone controls, and, perhaps most importantly, the blend between the D.I. and amp, this user gets

full control over the sound without ever losing it's authenticity.

The second user is one who, just like the previous user, wants the best possible amp modeling, but recognizes the fact that he/she cannot spend too much time tweaking it. That is why we have, for example, only a single tone control knob on the D.I. and a one-knob limiter. Don't be fooled by the simplicity, however; you still have the ability to create a unique signature sound. The strength lies in the very easy individual blocks (the amp, the D.I., the cabs and mics) and the ability to mix and match between them.



User Interface

Apart from a good sound, work flow is a crucial element of our design – the amps and mics should work just as they do in a real studio. We have tried to imitate this as much as it is possible in a computer environment, and if you have experience working in real studios, you will notice that Bass Amp Room handles and sounds just the way you expect it to.

Amp Panel (Top Area)

In the Amp Panel, you can alter the settings of the amp by clicking the knob and dragging the mouse up and down, or left to right. Switches can be switched either by clicking on them, or by clicking and dragging the mouse. In some hosts you can change the behavior of the mouse, but the default behavior of Bass Amp Room is the one described above.

Room View (Middle Area)

In the Room View you can do two things: select the other cabinet or change the mic's position.

Mic Position

When the mouse is located over a mic stand, the mouse pointer changes to an “updown” arrow and the mic gets a copper/goldish glow. Click-and-drag the mouse up or down to change the position of the mic stand. The microphone moves along a predetermined path, so you only need to move the mouse up or down, not to the left or right.

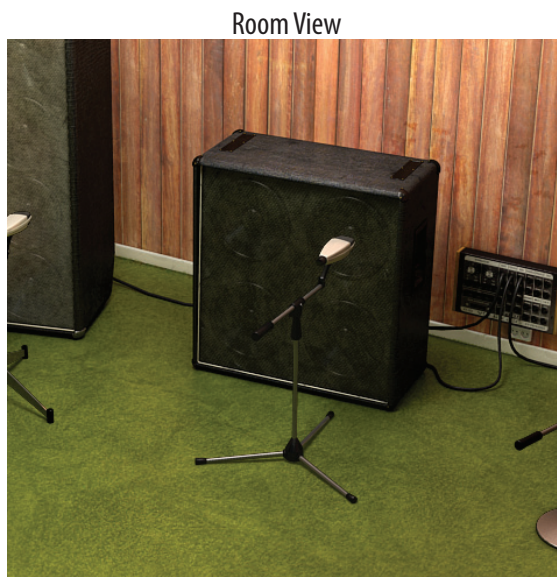
Cabinet Selection

You can change the cabinet by clicking on the background and dragging the mouse to the left or right. The mouse pointer becomes a “left-right”-arrow when you are pointing at the background to indicate that it is possible to change cabinet.

Clicking on the background while holding the Shift-key toggles through the cabs without any sliding animations.

Mix Panel (Bottom Area)

In the mix panel, you can change the balance between the amplifier signal and the D.I. signal. The tonality of the D.I. signal can be changed with the three EQ knobs and the compressor/limiter. You can also change the phase of the amplifier signal and adjust the output volume.





The Amplifier

The amplifier that we chose to model is actually a guitar amplifier, but because of its very characteristic “non-fizzy” distortion and special-sounding tone stack, it’s been very popular among bass players during the last decades. When the **High/Low** switch is set to **HIGH**, the amplifier will work and act just like the real thing. The **LOW** mode is the same amplifier with a slightly different input stage, one which lowers the input gain a little bit while adding some warmth to the signal. The **LOW** mode gives you a fat bass sound without too much distortion.

Use the two “volume” controls as a means of dialing in the right amount of distortion, not to change the actual volume. More **Normal Volume** gives you greater preamp distortion, and more **Master Volume** gives you greater power amp distortion.

High/Low Use this switch to select either the attenuated channel (**LOW**) or the regular channel (**HIGH**).

Normal Volume This knob controls the amount of preamp distortion, and is usually called “Gain” on more modern amps. Use it to dial in

the amount of distortion you want.

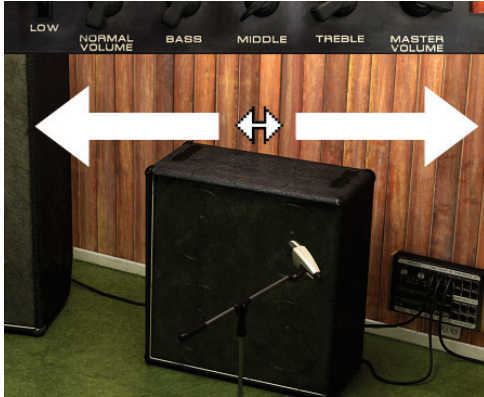
Bass, Middle, Treble These knobs are the tone controls of the amplifier. A common setting is **Bass** on full, **Middle** on min, and **Treble** somewhere in between.

Master Volume Adjusts the amount of power amp distortion. With a massive amount of **Master** and **Normal Volume**, the amp will start sound like it’s about to break. Unless you really want that kind of distortion you’ll find that a **Master Volume** at 12 o’clock will suit most of your needs.

Master Volume won’t distort much unless you increase the **Normal Volume**. Just like the real amp.

The Cabinets

Click and drag left/right on the background to change cabinets.



8x10

The industry standard 8x10" doesn't need much presentation. With a fat sound and lots of low end, this is the goto cabinet for many bass players.

4x12

The regular 4x12" cabinet is preferred by many bass players over the industry standard 8x10". It has a more focused sound than the 8x10", and although it's a bit thinner than the 8x10", it is often easier to work with in a mix.

1x12

This is the odd bird among the cabinets. While trying out cabinets for Bass Amp Room, we felt that we needed to listen to something completely different just to clear our minds. We found this old openback 1x12", plugged it in, and immediately fell in love with the sound. Some sort of '60s sound with lots of room. And you can dial in more low end if you need it just by moving the mic more to the off axis position.

Positioning the Mic

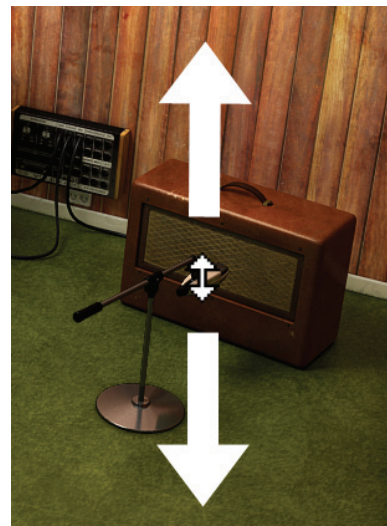
By changing the mic position, you can get lots of different sounds from a single cabinet. How the sound changes depends on the cabinet and the room, but there are some common features for all the cabs in Bass Amp Room:

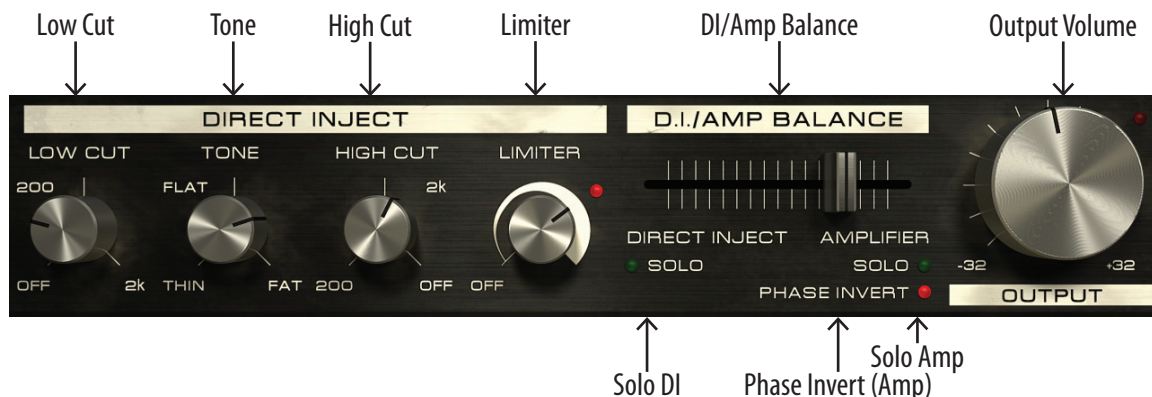
CLOSE OFF AXIS: The position with most bass and the least amount of highs.

CLOSE ON AXIS: Moving the mic towards the on-axis position will gradually give you more highs and a more pronounced mid. Usually the most "focused" sound.

FAR FIELD: Moving away from the cabinet will give you more room ambiance and often (but not always) a thinner sound.

If you find that the selection of cabinets isn't enough for you, you can always bypass the cabinet in Bass Amp Room and use the cabinets from one of our other Amp Room plugins (with the amp modeling bypassed).





The Mix Panel

SO, WHAT ELSE DO YOU NEED EXCEPT a good sounding amp? Since a lot of engineers and producers prefer to work with both the raw D.I. signal and the mic'ed signal (using the amp signal for character and the D.I. signal for focus or low end), we decided to incorporate that work flow into Bass Amp Room. But instead of having two tracks (one with the microphone signal and one with the direct bass line), you can easily blend the two signals directly in Bass Amp Room. And, to make life easier, we added a couple of very powerful tone controls and a state-of-the-art singleknob compressor in the D.I. section. That way you will be able to get a really good bass sound just by using the D.I!

Direct Inject (D.I.) Knobs

Low Cut A 12dB/octave low cut filter.

This control is intended for filtering out *unwanted* frequencies, but can, of course, be used more creatively. Keep increasing the knob until you cannot hear any difference in the sound. When you start to

lose the low end, stop and go back a couple of millimeters (yes, we are metric).

High Cut Same as the Low Cut, but for high frequencies.

Tone When this knob is set at 12 o'clock (**FLAT**), it doesn't change the sound at all. Turning it clockwise will give you a fatter and more scooped sound much like the tone stack in the amplifier. Turning it counter-clockwise will give you a sound with lots of mid.

Changing the **Low Cut** and **High Cut** will drastically change the characteristics of the **Tone** knob. Technically speaking, the center frequencies of the **Tone** knob filters will change when you change the bandwidth (the settings of **Low** and **High Cut** combined).

Limiter Use the limiter to increase the amount of compression. This function can, for instance, be

used to limit the peaks of the D.I. signal, and would then be set somewhere around 12 o'clock, depending on the level of the input signal. With a higher setting you will get a longer sustain on each note.

Limiter LED The LED on the top right of the **Limiter** knob indicates when the limiter is working (like a gain reduction meter).

Mix Knobs

D.I./Amp Balance This fader sets the balance between the D.I. signal and the amp signal. Use the **Solo** knobs to audition each channel (post fader).

Solo Click the Solo texts to solo either the Direct Inject channel or the Amplifier (and cabinet) channel. You can only solo one channel at a time, so by soloing one channel you automatically un-solo the other channel.

Phase Invert (Amp) Inverts the phase of the amp signal. Changing the relative phase between the D.I. signal and amp signal will often completely change the sound. If you have a hard time trying to find a good blend between the two signals, try flipping the **Phase Invert**. It usually

makes a big difference to the sound.

Phase invert! If you have the balance fader somewhere in the middle, you should make it a habit to toggle the **Phase Invert** switch. It can make a huge difference to the sound.

Output Sets the output volume. It goes from 32 dB to +32 dB, except at the minimum position where it turns off the output signal completely.

Output Peak LED The Output Peak LED indicates when the output signal peaks at 0 dBFS. Bass Amp Room will not clip the peaks, it is only an indication.

Bypassing Amps or Cabs

You can choose to bypass the amp or the cabinet by selecting **AMP BYPASS** or **CAB BYPASS** from the small box in the lower right corner.

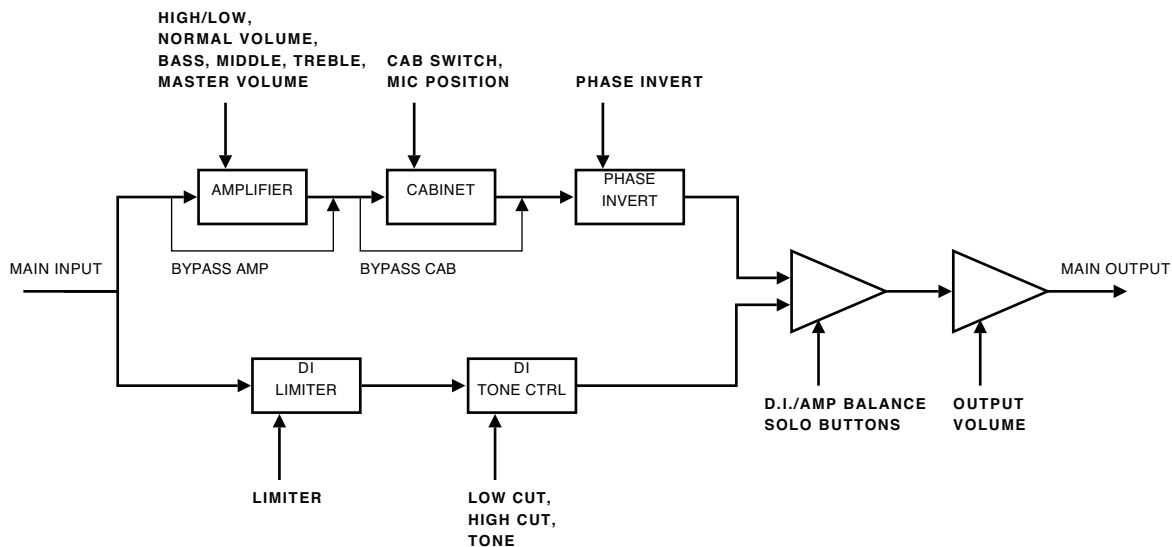
This is very useful if you want to use Bass Amp Room with an external speaker (or speaker plugin) or if you just want to add a cabinet simulation to a track, such as a recorded line out from your amplifier.

This will not bypass the D.I. section, since that can be easily done by setting the **D.I./Amplifier Fader** all the way to the right (on **AMPLIFIER**).

By bypassing the cabinets in Bass Amp Room, you can use the cabinets from the other Amp Room plugins. Just insert, for example, Metal Amp Room (with bypassed amplifier) on the track after Bass Amp Room (with a bypassed cabinet).

Block Diagram

The bass signal (Main Input) is split up into two identical signals, one that goes to the amp (top section) and one to the D.I. (bottom section). The two signals are mixed with the D.I./Amp Balance fader.



Buying Recommendations

If you like the sound from Bass Amp Room and would like to get that sound using the real deal (let's face it, a real amp is always sexier than a plug-in), here are some buying recommendations.

Amplifier

If you like this characteristic fat distortion and scooped-out tone stack, I would suggest that you get a two-channel Hiwatt DR103 from the late '70s/early '80s.

Cabinets and Mic

The leftmost cabinet was modeled after the industry standard of bass cabinets: the Ampeg 8x10" SVT810. If you like the 4x12 sound, I'd suggest that you try out a couple of different 4x12s, because we have absolutely no clue what kind of 4x12 we measured. It sounded excellent, had no labels on, and wasn't for sale... The small cabinet was a half-open 1x12" cabinet with a Celestion 20W/15ohm driver.

But you will also need a good sounding mic to get a good bass sound, and in our opinion nothing beats the Sennheiser MD421!

D.I. and Mix Panel

The tone controls of the D.I. and limiter was made by us and have no hardware counterpart.

Room

If you like the sound of the room, make sure to schedule a session at Care Of Sound in Norrköping.

BRAND NAMES ARE TRADEMARKS OR REGISTERED TRADEMARKS OF THEIR RESPECTIVE OWNERS.

Credits

Niklas Odelholm – modeling and sound design.

Oscar Öberg – compressor modeling, framework programming. **Torsten Gatu** – interface programming. **Arvid Rosén** – framework programming. **Ulf Ekelöf** – 3D rendering.

