

USER MANUAL CHUCK



UNDERDOG®



CONTENT

Chuck a tool for you	3
Protect yourself and those who are important to you - Safety first	6
I want to get started right now - Quick start	8
I want to know more	13
Give me all the info! Expert knowledge, the expert mode	23
Studio - fully explained	28
You need help, here you get it - support	39
Facts, Figures and Data	41
There is only one earth protect it - end of life	48



CHUCK A TOOL FOR YOU



CHUCK:

It's in your hands: the brand new **tube amplifier** in **pedal format** is your perfect companion - whether on stage, in the studio or when practicing in the living room. With **DSP, IR loader, AMP simulation, MIDI** and **USB interface** (yes, also for audio and control!), it offers everything your guitarist's heart desires. And the built-in **25W amplifier** ensures that your sound doesn't only sound good, but hits you right in the face - crisp, clear and always on point.

Whether you're a beginner or a veteran, you'll find your sound with this piece, no frills. Just unpack it and get started? No problem. Refine the sound down to the smallest detail? Yes, for sure! Or would you prefer to dive deep into the settings and create your own sound signature? Of course - you set the tempo and style. Your sound. Your amplifier.

Feature list:

- Real tube-sound that you can tune electronically
- Adjustable BOOSTER
- IR loader
- 4 effects (REVERB, DELAY, CHORUS, WAH)
- Customizable presets
- Tuner
- Serial or parallel FX loop (can be operated unbalanced or balanced)
- USB ASIO
- Power amplifier (25W into 4 ohms)
- AMP simulation
- MIDI control
- Robust design & solid floor format
- Power-Output 9V/800mA for external effects



STUDIO:

With our **STUDIO** software for PC and MAC, you have full control over your **CHUCK**. All settings and parameters are easy to manage and you can save your presets outside the device. This way, you always have an overview and ensure your perfect sound - whether you're tinkering on the computer or live on stage. No stress, full power, maximum sound!



**PROTECT
YOURSELF
AND THOSE
WHO ARE
IMPORTANT
TO YOU -
SAFETY FIRST**



The **CHUCK** is your faithful companion, but there are a few things you should bear in mind to make sure it lasts a long time:

Don't open it yourself - tube devices are tough! Our support experts are here to help if you need it.

Replacing tubes - ROAR tubes are real powerhouses, but it's best to have a specialist do the work when replacing them - this protects the electronics.

Attention during maintenance - Switch off the **CHUCK** and disconnect the power supply before opening it.

Power supply unit - Only use the power supply unit supplied - the power fits perfectly.

Cold transport - If you are transporting **CHUCK** at temperatures below 0 °C, allow it to acclimatize before you start.

Safety glass - If the protective glass in front of the tubes is defective or missing - please do not use.

Volume - No volume limit! So always pay attention to your hearing!

Tube care - The service life of the tubes depends greatly on how you treat **CHUCK** - give it some love and it will thank you for it for a long time!



**I WANT
TO GET
STARTED
RIGHT NOW -
QUICK START**



General:

The **CHUCK** makes it easy for you: It always starts with your last selected preset and shows it directly on the display - including the last mode used.

There are two modes:

- **Preset mode:** Simply switch through the presets and get started.
- **Edit mode:** Here you can customize your presets to suit your taste.

And for those who want to go deeper, there is the **Expert Mode**. In both modes, you can adjust the parameters of each effect (REVERB, DELAY, CHORUS, WAH) down to the last detail. Customize in detail. Your sound, your style - **CHUCK** makes it possible!





Operation:

Our legend:

↻ Turn 🖱 Short Push 🖱 Long Push

Foot switch TUNER / MODE

- 🖱 TUNER on/off
- 🖱 MODE switch between Preset Mode ● / Edit Mode ●

7 Mode foot switch

Preset Mode:

- 🖱 Select the preset you want
- 🖱 Saves the current sound configuration in the selected preset

Edit Mode:

- Switch the BOOSTER on/off, select the CHANNEL of the PRE AMP (CLEAN, CLASSIC, MODERN) and activate the desired effect

4 Encoder

BOOSTER

- ↻ Change GAIN, TONE, VOL
- 🖱 Switch between GAIN, TONE, VOL

PRE AMP

- ↻ Change GAIN, VOL
- 🖱 Switch between GAIN, VOL
- 🖱 Switch the VOICING

EQUALIZER

- ↻ Change LOW, MID, HIGH, AMP
- 🖱 Switch between LOW, MID, HIGH, AMP

EFFECT

- ↻ Change REV, DLY, CHOR, WAH
- 🖱 Switch between REV, DLY, CHOR, WAH

1 Encoder for display operation

- ↻ Choose
- 🖱 Confirm
- 🖱 Back



Display menu:

The **display menu** and the encoder put you in control.

A pen in the upper right corner indicates unsaved changes - like a reminder that you should save something

Here are the options available to you:

- **Preset:** Shows your selected preset with channel and voicing. Give your preset a new name and choose the right color - easy!
- **IR:** Choose between IR-A and IR-B, or mix them to find the perfect sound.
- **Main EQ:** Here you can set your EQ in the DSP to suit your taste.
- **Expert Effect Settings:** The Expert Mode takes you deep inside - activate it and parameterize each effect (REVERB, DELAY, CHORUS, WAH) as detailed as you want.
- **Output Control:** Determine which output is fed with the IR Loader and the AMP simulation, and adjust the volume.
- **System settings and factory reset:** if you want to start from scratch.

Every step brings you closer to your perfect sound - and the **CHUCK** ensures that you always have an overview!



**I WANT TO
KNOW MORE**



PRESET MODE, UNPACK, SWITCH ON AND GET STARTED

In **preset mode**, it's straight down to business: plug in your guitar, connect it to the speaker - and there you go. Use the footswitches to switch through the factory presets 1 to 7, which we've tuned to give you a solid basis for your sound.

Of course you can trim the presets to your style. Check the **edit mode** for this. This allows you to adjust your sound at your leisure, and when you're on stage, everything is ready to go at the touch of a button.

EDIT MODE

In **edit mode**, you can customize the **CHUCK** exactly to your requirements. Each encoder (BOOSTER, PRE AMP, EQUALIZER, EFFECT) has 31 fine stages that you can adjust by turning. The LED ring around the encoder shows you exactly where you are - 15 LEDs with two colors and "off" display a total of 31 levels.

Each encoder has its own LEDs that indicate different settings. A short press on the encoder switches through the LEDs, while the LED ring shows the current setting. Press and hold the **PRE AMP** encoder to change the **voicings** of your channel (CLEAN, CLASSIC, MODERN).

You can easily switch the **BOOSTER, REVERB, DELAY, CHORUS** and **WAH** footswitches on or off. Use the two **CHANNEL** buttons to switch between CLEAN, CLASSIC and MODERN.

Incidentally, you can also use the encoders for BOOSTER, PRE AMP, EQUALIZER and EFFECT in **preset mode** to make fine adjustments. The LED ring shows you immediately whether an effect or the booster is active in the preset - if the LEDs light up in the complementary color (e.g. blue instead of green), the setting is inactive.



What is saved in the preset? That's what you change by pressing the foot switch.

- All settings of the BOOSTER, PRE AMP, EQUALIZER, EFFECT **encoders**, everything you set by turning and pressing
- All settings in **edit mode**, BOOSTER on/off, selected channel (CLEAN, CLASSIC, MODERN), respective effect on/off
- **FX loop** incl. all **parameters** (but GND lift is global)
- **Display menu:**
 - Set preset name and color
 - Settings in the Main EQ
 - Settings in IR
 - Settings in the Expert Effect Settings - see section Expert Mode

The AMP simulation mimics the frequency response of three tube power amplifiers and offers 30 settings for presence, resonance and the output transformer. It is deactivated at the lowest level and can therefore be saved in the preset.

Tip: Set the AMP simulation to 0 first and use it later to fine-tune the sound.

Pay attention, your settings will be lost if you do not save them!

This happens if you switch off the **CHUCK** or **change the preset** without saving first. Even a short press on the footswitch of the current preset is enough to lose unsaved changes.

For example, if you want to have two versions of **Metal** - one with the booster activated, then do it that way::

1. Select the **Metal** preset (after factory reset on foot switch 6)
2. Press the **mode button** briefly to switch to **edit mode**.
3. Activate the **booster** and adjust the parameters as you wish.
4. Press the **mode button** again briefly to switch back to **preset mode**.
5. Press and hold foot switch 3, for example, to save the preset with the booster active. But this will overwrite the **Grunge** preset.

Small Reminder: Don't forget to save, otherwise everything will be gone!



DISPLAY MENU

The display and the encoder are your control center for the **CHUCK**. This is where you get all the information and can easily make your settings.

As a reminder:

- **Turning** the encoder selects the options.
- **Short press** selects.
- **Long press** takes you back to the menu.

The selected button is highlighted - so that you always know where you are currently rocking.

Preset



Select your preset and give it a name that matches your sound. Make it complete with the **color selection**: Your desired color appears on the display and also lights up on the color ring around the footswitch. So you can see at a glance which sound is available on demand - clear, direct and exactly your style!

IR

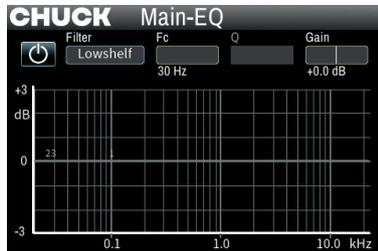


On this page you select your **speaker simulation**. You have an **A-** and a **B-side**, one of them must always be active. If you feel like it, you can activate both and mix the IRs with the **panning control**. With the -180° switching surface, you can turn the phase on each side to suit your taste. There's also a **low and high cut** on each side to shape your sound perfectly.

In the list, you can switch back and forth between the **12 factory IRs** and your **user IRs** (20 slots). You can check how to get your own IRs into the **CHUCK** in the **STUDIO** section.



Main-EQ



The **Main EQ** sits at the end of your signal path and ensures that your sound - including all effects - is perfectly balanced. You can easily switch it on or off.

You can choose from the following filters:

- **Lowshelf**
 - Fc 30H to 1kHz
 - Gain -12db to 12db
- **Peak 1, 2, 3** with the respective parameters:
 - Fc 30Hz to 18kHz
 - Q 0,3 to 5
 - Gain -12db to 12db
- **Highshelf**
 - Fc 1,5kHz to 18kHz
 - Gain -12db to 12db

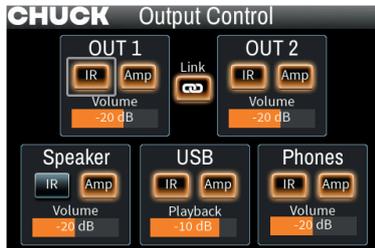
Expert Effect Settings



On this page, you can switch on the **Expert Mode** for each effect separately. Simply select the **Expert button** and there you go. You can then dive deep into the settings and customize everything according to your taste. For information on the **respective settings**, please refer to the Expert Mode section.



Output-Control



On the **Output Control** page, you can set the volume for all 5 outputs. You can also specify for each output whether it is assigned to **IR** and **AMP** simulation.

Use the **Link** button to connect **OUT 1** and **OUT 2** so that you can control both outputs directly via **OUT 1**.

Important: These settings are **global** - they apply to all presets and are not saved individually.

Menu



You can use the Menu page to select various items for setting up your **CHUCK**.

FX-Loop



Let's rock the FX loop: With the "**FX Loop**" sub-page, you can control your parameters exactly as your sound requires. Here you even have the option of completely decoupling the **ground** of the FX loop - perfect if you have a second effect in the guitar signal that is also supplied by the **CHUCK**.

Serial or **parallel** loop mode? Decide for yourself. In parallel mode, the **dry-wet control** is used for fine-tuning.

Tip: Check the signal path for optimum integration of the FX loop.

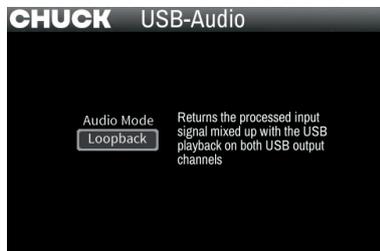
Use the Send Level to set the output level of the FX SEND socket between -30dB and 0dB - and the Return Level adjusts the level that returns to the signal path via the FX-RETURN socket between -30dB and 12dB.

Important: The FX-RETURN socket has a sensor that registers whether a plug is connected.

This means: connect the effect, activate the FX loop in the menu and the setup is ready to deliver exactly the sound you want to bring to the stage.



USB-Audio

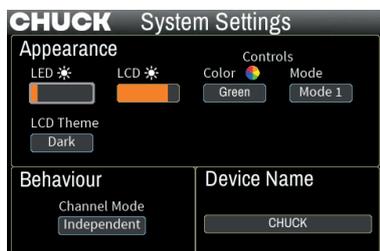


Here you can set the USB audio mode exactly to your taste:

- **WET – WET:** Your guitar signal comes out fat and refined on both channels out - ready for action.
- **DRY – WET:** On the left is your unprocessed signal, raw and pure - on the right the processed. The perfect combination for anyone who wants full control in the mix.
- **LOOPBACK:** This is where it gets powerful - the processed guitar signal merges with the USB playback, and you get the full sum served up on both channels.

No matter which mode you choose, you make the sound an experience.

System Settings



With the **LED** and **LCD** buttons, you can adjust the brightness and put your control unit in just the right light.

Color and **Mode:** This is where it gets down to business - choose the colors and the behavior of the LED rings around the encoders and make them your signature style.

You can easily switch between dark and light mode via the **LCD theme**. This way, your setup adapts exactly to your vibe, whether on stage or in the studio.

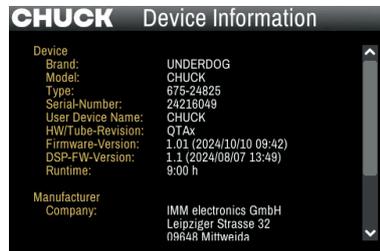
With **Channel Mode** you decide for yourself how flexible your setup should be:

- **DEPENDENT:** Each channel has its own gain, voicing and volume setting - customized for your sound on each channel.
- **INDEPENDENT:** A single setting for all channels - gain, voicing and volume are synchronized and deliver consistent power.

And with **Device Name** can you give your **CHUCK** his personal name. So everyone knows immediately who sets the tone here



Device Information



At **Device information** you can find everything you need to know about your **CHUCK** - including the serial number and more.

Here you will also find all the information you need to contact support if your setup requires assistance.

Factory Reset



For the **factory reset** without menu:

After switching on your **CHUCK**, you have 1 second to press **Tuner/Mode, Booster/1, Chorus/6** and **Wah/7** at the same time. As soon as all LEDs light up red, release the buttons - and your Chuck will return to the factory settings.



COMPLETE CONNECTION LIST

For more information, see the technical data.

AUX IN	3,5mm jack	Analog input Is mixed to the headphones in addition to the guitar signal. For example use as a backing track from an audio source
GIT IN	6,3mm jack	Guitar input
FX - SEND	6,3mm jack	Connection for external effect output Signal path Chuck to effect
FX - RETURN	6,3mm jack	Connection for external effect output Effect to Chuck Switchable mass decoupling of the FX Loop in the display menu, useful if an effect is looped into the guitar signal in addition to the FX Loop and is also fed from the Chuck.
GND LIFT	Switch	Hum loop reduction the ground of the XLR sockets OUT 1 and OUT 2, pressed = active
OUT 1	XLR and 6,3mm jack parallel	Signal output 1
OUT2	XLR and 6,3mm jack parallel	Signal output 2
SPEAKER	6,3mm jack	Amplifier output 25W @4Ω for direct operation of a loudspeaker. Caution when connecting to a mixing console, for example, use a DI-box.
HEAD PHONE	3,5mm jack	Connection for headphones
USB	USB -B	USB connection to PC or MAC



MIDI IN	DIN 5 Socket	Midi input
MIDI OUT/THRU	DIN 5 Socket	Midi output and Midi pass-through. Forwarding of all commands not intended for the Chuck
DC OUT	Hollow socket	Output for supplying for example effects
DC IN	Hollow socket (locked)	Power supply connection
POWER	Switch	Switch for turning the Chuck on and off

In **expert mode**, you can get the most out of your effects - reverb, delay, chorus and wah - and adjust them down to the smallest detail.

To activate expert mode, navigate to the appropriate page in the display menu. Alternatively, you can also use the **STUDIO software** to activate the mode and adjust the settings to your taste.

If you activate **expert mode** for an effect, every second LED around the encoder lights up. Once you have navigated to the effect by pressing the encoder, the sound remains exactly as you have set it in the settings - turning the encoder here no change here.

In the **settings**, you will find the parameters to shape your effect exactly as you need it. Each effect has several modes - depending on the selection, some controls are hidden if they are not needed in the current mode.

Your settings, whether **Expert Mode** is on or off and the parameters, are saved directly in the preset when you save it. So your sound stays on point every time.



**GIVE ME ALL
THE INFO!
EXPERT
KNOWLEDGE,
THE EXPERT
MODE**



REVERB



Here come the reverb parameters that give you full control over your room sound:

- **Mode:** Switches between different reverb models - find the character that suits your sound.
- **Diffusion:** Determines the diffusion of the reverb - from **Soft** for even, dense reverberation to **Sharp** for a crisper effect. Soft is the favorite for most applications.
- **Pre-Delay:** Defines the delay before the reverb kicks in. Higher values simulate larger rooms.
- **Decay:** Controls the length of the reverb - just right for adjusting the size of the room.
- **High Damp:** Attenuates high frequencies in the reverb. At 0, all frequencies remain the same; higher values reduce the reverberation time for high frequencies.
- **Low Cut:** Sets the frequency limit above which the reverb takes effect - perfect for keeping the bass range clear.
- **High Cut:** Determines the upper frequency limit for the reverb and keeps the sound defined.
- **Mix:** Adjusts how much reverb is added to the dry signal - from a delicate shimmer to a room-filling effect.

With these settings, you can make the reverb a customized part of your sound.



DELAY



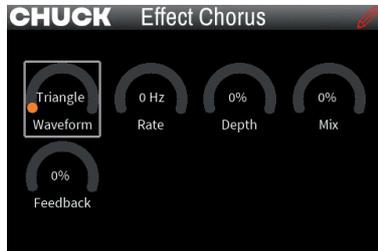
Here are the delay parameters to fine-tune your sound:

- **High Damp:** Regulates the damping of high frequencies. At **LOW**, all frequencies remain the same; at **HIGH**, higher frequencies are attenuated more.
- **Feedback:** Determines the number of repetitions. Low values for few echoes, high values for a dense delay.
- **Time:** Sets the interval between repetitions - ideal for varying from short slapback delays to long echo effects.
- **High Cut:** Determines the upper frequency limit for the delay so that only the desired frequency range remains in the echo.
- **Mix:** Controls how much delay is added to the dry signal for the perfect balance between original and echo.

These parameters give your delay the power to deliver exactly what your sound needs.



CHORUS



Here are the parameters for your chorus to give your sound the perfect shimmer:

- **Waveform:** Determines the modulation waveform - **A.Sine** creates an asymmetrical sine wave for a unique modulation effect.
- **Depth:** Sets the amplitude of the pitch modulation and influences how much the duplicated signals oscillate in pitch.
- **Rate:** Sets the tempo of the modulation curve and lets you choose between subtle movement and fast vibes.
- **Feedback:** Determines how often the duplicated signals are repeated, intensifying the chorus effect.
- **Delay Time:** Sets the delay time of the duplicated signals (recommended: 15 ms) and influences the depth and width of the effect.
- **Mix:** Adjusts the proportion of the chorus signal that is mixed with the dry signal for the perfect balance.

With these settings, your chorus will become an unmissable highlight in your sound setup.



WAH



Here are the wah parameters that give you maximum control over your sound:

- **Mode:** Choose between different wah modes - **Up** for increasing intensity (sharper with **Up2**), **Down** for decreasing intensity, and **Auto**, where the wah is automatically controlled by **rate** and **width**.
- **Filter:** Sets the filter type for the wah and shapes the basic character of your wah.
- **Waveform:** Determines the waveform of the auto wah and influences the dynamics of the modulation.
- **Rate:** Controls the speed at which the auto-wah opens and closes.
- **Width:** Controls how far the filter frequency is shifted by the auto-wah, making the wah wider or closer.
- **Attack:** Sets the time it takes for the wah to open - for smooth or fast transitions.
- **Release:** Determines how long it takes for the wah to close again.
- **Sensitivity:** Sets the sensitivity with which the wah reacts to your playing intensity - perfect for dynamic playing.
- **Manual:** Determines the starting position of the wah pedal when you control it by hand. manually.
- **Depth:** Controls the resonance of the filter and so the intensity of the wah.
- **Mix:** Determines the proportion of the wah signal in the mix. At 100%, you only hear the wah signal, without the dry signal.

With these parameters, you can turn your wah into a multi-purpose expression tool for your performance!



STUDIO - FULLY EXPLAINED



Underdog STUDIO is more than just a tool - it's your personal sidekick for shaping, capturing and managing your sound. Here you have all the functions of your **CHUCK** at your fingertips. But the **STUDIO** goes even further:

- **Save and share presets:** Save your settings, restore them when needed or share them with bandmates and the community - because good sound shouldn't stay secret.
- **Create product clones:** Create copies of your settings, synchronize them with other **CHUCKs** or reset your own **CHUCK** if you need to.
- **Load your own IRs:** Personalize your sound and load custom impulse responses directly to your **CHUCK** for a setup that's as unique as you are.
- **Always keep your firmware up to date:** Get the most out of your **CHUCK** with the latest updates and always stay up to date.

This section assumes that you have already read the previous points, as you will learn the technical details that will give you the base here.



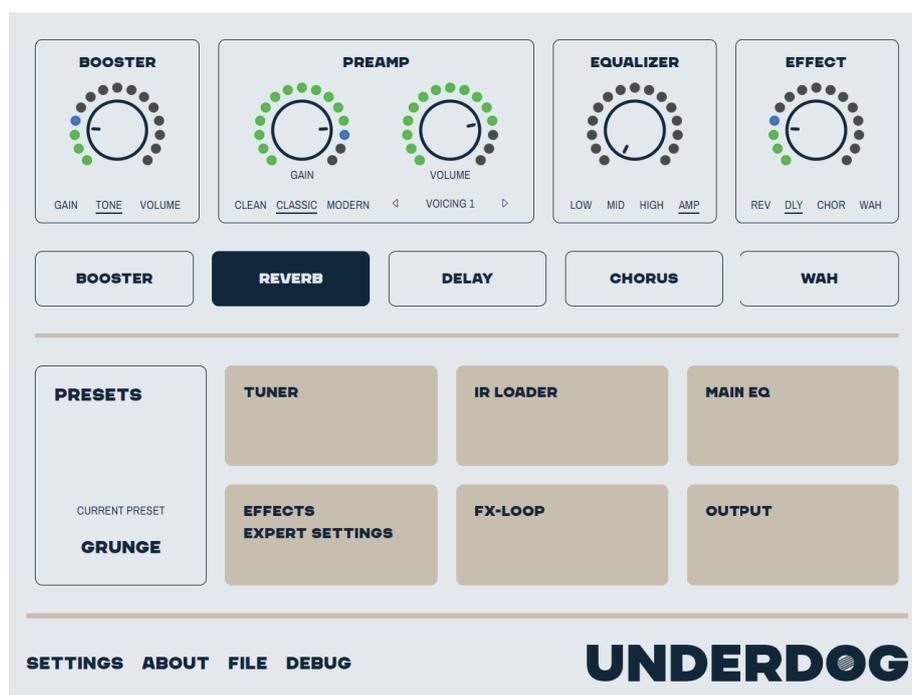
INSTALLATION

Get the right installation package for **Mac** or **PC** directly from our website and get started:

1. **Download** and install – easy.
2. The **ASIO-driver** is extra - simply download and install.

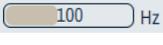
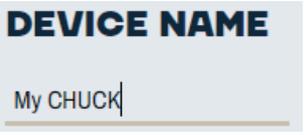
If you are operating several **CHUCKs** at the same time, no problem: simply start **STUDIO** several times and select the device you want to control each time.

	Windows	Mac
Processor	Dual-Core 64-Bit	Dual-Core 64-Bit
Working memory (RAM)	4G	
Hard disk	min 500 MB	
USB	min USB 2.0	
Operating system	Windows 10/11	min macOS 10.13 (High Sierra)



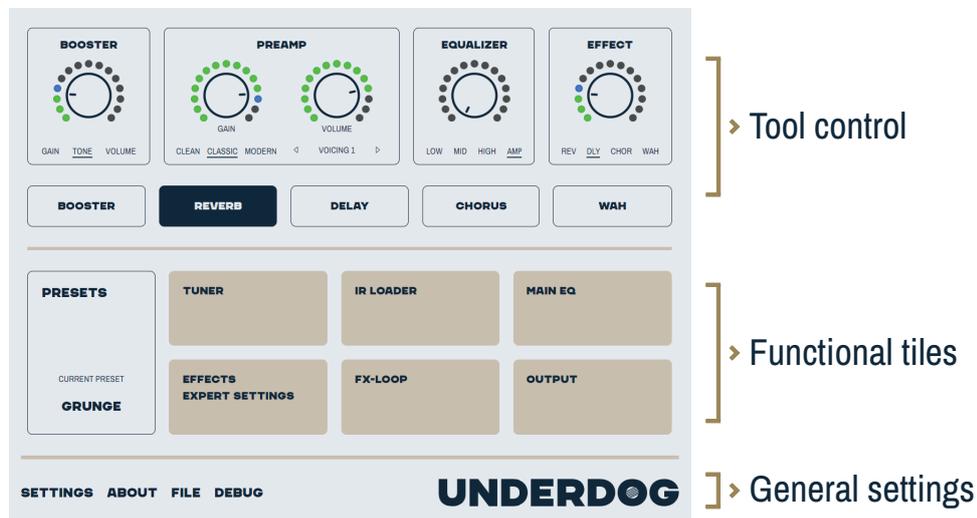


CONTROLS

	<p>Encoder</p> <ul style="list-style-type: none"> • Illustration of the hardware encoder of the product • Operation by “dragging” up or down or scrolling
	<p>Selection of options</p> <ul style="list-style-type: none"> • Select by simply clicking on the desired option or by clicking on the arrows
	<p>Button</p> <ul style="list-style-type: none"> • Triggers function with a simple click
	<p>Toggle Button</p> <ul style="list-style-type: none"> • Switch between functions e.g. booster on/off by clicking
	<p>Tile</p> <ul style="list-style-type: none"> • Click to open the named function panel/overlay
	<p>Slider</p> <ul style="list-style-type: none"> • Operation by “dragging” to the left/right, scrolling or direct input by double-clicking
	<p>Gauges</p> <ul style="list-style-type: none"> • Operation by dragging up/down or scroll wheel • Direct input via double-click possible in some cases
	<p>Input box</p> <ul style="list-style-type: none"> • Click inside the element to activate input option • <ESC> or click outside discards the input • <Enter> saves the input, provided there are no validation errors • BIf invalid characters are entered a hint text appearst



MAIN VIEW



The **STUDIO** interface brings structure to your workflow - divided into three areas:

1. **Tool control** – your central control center.
2. **Functional tiles** – for quick access to all important features.
3. **General settings** – here you adjust all the basic settings.

So you can find everything you need for your sound right away.

Tool control

Here you get full control over your **CHUCK**:

- **Encoder and footswitch:** Just like on the device itself - every function is shown here and is easily accessible.
- **Gain & Volume:** In the **PRE AMP** section, you have separate encoders for **gain** and **volume** - a real benefit for accurate sound tuning.
- **Function selection:** You can set **GAIN, TONE** and **VOLUME** directly below, as required.
- **Channel selection:** Here you can choose between **CLEAN, CLASSIC** and **MODERN** - without up/down buttons like on the device, but directly with a click.
- **Foot switch illustration:** The foot switches for the **booster** and all four effects are also integrated so that you have your effects under control immediately.

Everything exactly where you need it - for intuitive handling and quick setup.



Functional tiles

Preset management

The **PRESETS** tile gives you quick access to all your sounds and you can immediately see which preset is currently active. If you have made changes to this preset, the **SAVE CHANGES** button appears, which you can use to save the adjustments directly.

In the **preset management** you will find a clear list of all your presets - each with its own color and name, just the way you like it. Switching to another preset is just a click away.

A click on “...” or a right-click on a preset opens the **context menu**, in which the following options are available to you:

Save here	saves the current settings to this preset location
Rename	renames the preset <ESC> or click discards, <RETURN> saves
Change Color	Opens the color selection
Save to Disk	Saves the preset by displaying a “Save as” dialog
Load from Disk	loads a *.cpd file to the selected slot using the “Open file” dialog

This means you always have **full control** over your presets and can customize them in no time at all!

To adjust the color of a preset, simply click directly on the **color bar** next to the preset name - this opens the color selection and you can customize the look.

Tuner

If you activate the **tuner** on your **CHUCK**, all other settings are temporarily locked - just like on the device itself. This allows you to concentrate fully on tuning without any distractions.



IR Loader

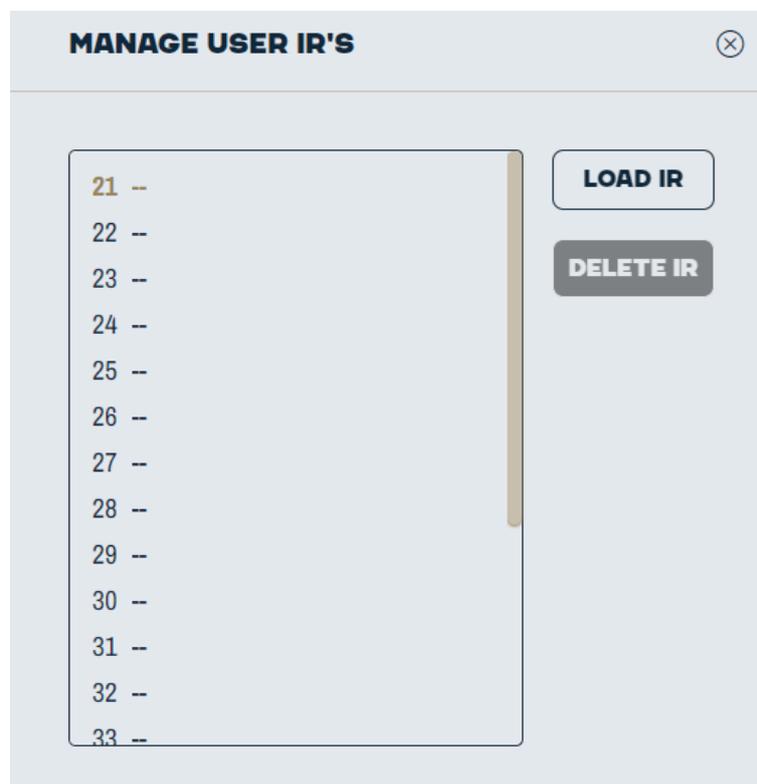
Here you have full control over your IRs:

- **Switch IR A and B on/off:** Each IR channel can be activated or deactivated separately using the power button.
- **Invert phase:** For the perfect sound balance, you can invert the phase of the IRs with the change button.
- **Panning, low & high cut:** Set the **panning** as well as the **low** and **highcut frequencies** to fine-tune the sound. One of the sides, IR A or IR B, always remains active.

Use the **Manage List** to load your own IRs:

1. Select a **user slot** as the destination.
2. Click on **Load IR** to select an IR WAV file via the “Open” dialog.

In the **USED BY** area, you can see which presets use a specific IR. You can **delete** the **IRs** if they are used in a preset, in which case the first **factory IR** is used





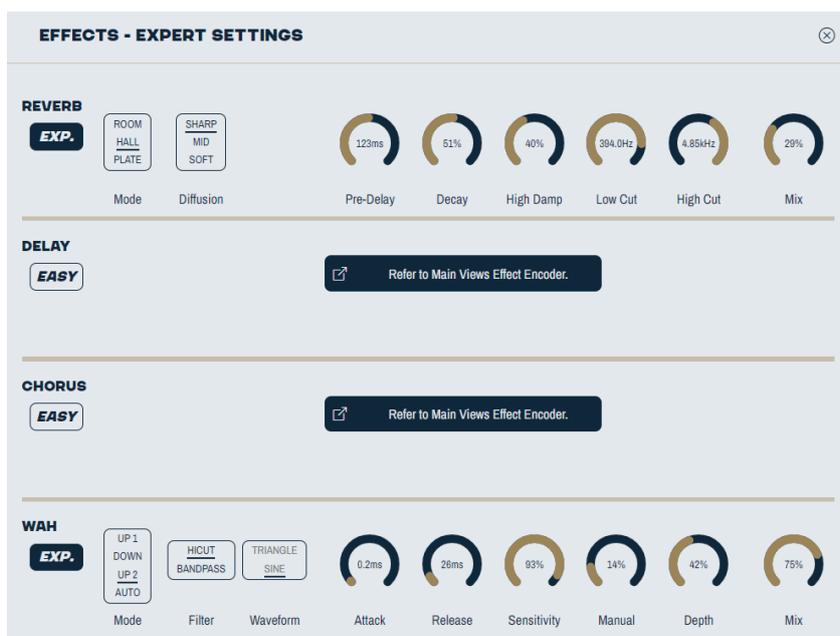
Main Equalizer

You can easily switch the **EQ** on or off using the **on/off switch**. If the EQ is inactive, the frequency response appears in **gray** - if it is active, it lights up in **terra-tone**.

All setting options can be found as usual in the **CHUCKs display menu**. So everything remains familiar and directly accessible!

Effects – Expert Settings

If you use one of the four internal effects in **Easy Mode**, the **Easy button** appears in the effects slot. This takes you directly back to the **effect encoder** and the appropriate function - for quick switching and direct access to the most important settings.



As soon as you activate **Pro mode**, the **Easy button** switches to **Pro** and displays all the advanced controls. The value ranges and functions are identical to those on the **CHUCK** - so you retain full control over every parameter, just as you are used to.



FX-Loop

You can conveniently activate or deactivate the effect with an **on/off switch button**. All **setting options** are exactly the same as directly on the device - you have full reference and control, without any detours.

Output Control

Keep all **outputs** under control: Here you have full **control** over every output, just like directly on the device - **reference** included. This ensures that your sound comes out exactly how you want it.



GENERAL SETTINGS

Settings

Here you will find all the important settings to personalize your **CHUCK** exactly as you want it and keep it up to date:

- **User-defined device name:** Change the **device name** as you wish - so everyone knows which **CHUCK** is yours.
- **Save and restore device clones:** With the Device **Clone function**, you can save complete clones of your settings and restore them quickly if required.
- **USB Audio Modes:**
 - **WET – WET:** Your guitar signal comes out fat and refined on **both** channels - ready for action.
 - **DRY – WET:** On the **left** is your unprocessed signal, **raw and pure** - on the **right** the **processed** signal. The perfect combination for anyone who wants full control in the **mix**.
 - **LOOPBACK:** This is where it gets **powerful** - the processed guitar signal merges with the **USB playback**, and you get the **full sum** served up on both channels.
- **Channel Mode:**
 - **DEPENDENT:** Each channel has its own **gain, voicing** and **volume setting** - tailored to your sound on each channel.
 - **INDEPENDENT:** A single setting for all channels - **gain, voicing** and **Volume** are **synchronized** and deliver uniform power.



- **Update / Reset:**

- **Application – Check for Updates:** Check manually if a new version of **STUDIO** is available.
- **Firmware – Update Device:** Update the firmware of your **CHUCK** if **STUDIO** provides a newer version.
- **Factory Reset – Reset Defaults:** Reset your **CHUCK** to the factory settings if you need to restart it.
- **Firmware update:**
 - Each new firmware is released along with an updated version of **Underdog STUDIO** to ensure full compatibility.
 - If a newer firmware is available in **Underdog STUDIO**, you can find it under **Settings / Update / Firmware** and start the update there directly.

With these tools, your **CHUCK** is always up to date and set up exactly the way you need it.



**YOU NEED
HELP,
HERE YOU
GET IT -
SUPPORT**



You can find the answers to most questions in our **FAQ** on the website:
www.underdog-audio.de

Mail:

support@underdog-audio.com

Phone:

- **Free of charge in Germany:** 0800-underdog (0800 / 86337364)
- **From the rest of the world:** +49 03727 6205-153
- **Availability:** Monday - Friday, 9am – 3pm (CET)

We are there for you - whether online or by phone!



FACTS, FIGURES AND DATA



ZAHLEN, DATEN UND FAKTEN

Guitar - Input

Typ	6,35mm jack socket asymmetrical
Impedance	1 MOhm
Input level max.	12 dBu

FX - Loop

Send

Typ	6,35mm jack socket asymmetrical / symmetrical
Impedance	75 Ohm asymm. / 150 Ohm symm.
Output level max.	6 dBu asymm. / 6dBu symm.

Return

Typ	6,35mm jack socket asymmetrical / symmetrical
Impedance	8 kOhm asymm. / 10 kOhm symm.
Input level max.	6 dBu asymm. / 6dBu symm.

Out 1&2

Typ	6,35mm jack socket asymmetrical / symmetrical XLR-Built-in plug symm..
Impedance	75 Ohm asymm. / 150 Ohm symm.,
Output level max.	12 dBu asymm. / 12dBu symm.

Speaker

Typ	6,35mm jack socket asymmetrical
Performance @ 4Ohm	25W



Kopfhörer

Typ	3,5mm jack socket stereo
Performance @ 32 Ohm	40mW / Channel

Aux In

Typ	3,5mm jack socket stereo
Impedance	10 kOhm
Input level max.	9dBu

USB

Typ	USB 2.0, Typ B
Audio	2 In/2 Out, 48 kHz, ASIO supported

MIDI

Typ	DIN 5 socket, 180°
-----	--------------------

DSP

Latency	<1ms basic delay (without IR and amp)
Resolution	24bit

Memory

Presets	7
IR	12 factory IRs, 20 user IRs

IR - Loader

file format	.wav
Sampling rate	48 kHz Intern, 44,1 kHz to 192 kHz supported
Resolution	24 bit
Points	512/1024/2048*



Power

Input	24V/2A
Output	9V/0,8A

Other

Dimensions	B/H/T 500 x 65 x 156 mm
Weight	3.2kg
Accessories	USB cable Typ A to Typ B, Power supply, Quick-Start

*is internally limited to 1944 points

Permissible environmental conditions:

Operation 0-40°C

Transportation -10° to +50°C

No condensation permitted

Up to max. 2000m above sea level

Indoor use or protected from rain

Beer-proof from above, do not bathe.

Cleaning:

It is best to remove dust and loose dirt with a dry cloth.

If necessary, wipe with a slightly damp, non-dripping cloth. A light detergent such as dishwashing liquid can also be used as an aid. It is important to disconnect the **CHUCK** from the power supply beforehand.

Midi command list

Program Change

Preset 1-7 can be activated by MIDI Program Change with patch number 0...6.

CHUCK will send Program Change to MIDI Channel 0 with patch number 0...6 when a preset is selected.



Parameter Mapping

General

Parameter (CHUCK)	Devices Range	MIDI-CC	MIDI Values
Active Channel	0 ... 2	16	0: Clean 1: Classic 2: Modern
Booster Enabled	0 / 1	17	0: 0...63 1: 64...127
Reverb Enabled	0 / 1	18	0: 0...63 1: 64...127
Delay Enabled	0 / 1	19	0: 0...63 1: 64...127
Chorus Enabled	0 / 1	20	0: 0...63 1: 64...127
Wah Enabled	0 / 1	21	0: 0...63 1: 64...127
FX Loop Enabled	0 / 1	22	0: 0...63 1: 64...127
Live Mode	0 / 1	23	Preset Mode: 0...63 Live Mode: 64...127
Tuner Mode	0 / 1	24	0: 0...63 1: 64...127
Channel Down / Up	-	25	Down: 0...63 Up: 64...127
Next Voicing	-	26	N/A



Booster

Parameter (CHUCK)	Devices Range	MIDI-CC	MIDI Values
Gain	0 ... 30	70	1:1
Tone	0 ... 30	71	1:1
Volume	0 ... 30	72	1:1

Channel

Setting these parameters will only affect the currently active channel.

Parameter (CHUCK)	Range	MIDI-CC	MIDI Values
Gain	0 ... 30	73	1:1
Volume	0 ... 30	74	1:1
Voicing	Clean 0 & 2 Others 0 ... 3	75	1:1
EQ Low	0 ... 30	76	1:1
EQ Mid	0 ... 30	77	1:1
EQ High	0 ... 30	78	1:1
Amp	0 ... 30	79	1:1

Effects

Parameter (CHUCK)	Devices Range	MIDI-CC	MIDI Values
Reverb	0 ... 30	91	1:1
Delay	0 ... 30	92	1:1
Chorus	0 ... 30	93	1:1
Wah	0 ... 30	94	1:1



FX Loop

Parameter (CHUCK)	Devices Range	MIDI-CC	MIDI Values
Send Level	-30.0 ... 0.0	102	0...60 => 0.5 dB steps
Return Level	-30.0 ... 12.0	103	0...84 => 0.5 dB steps
Loop Mode	0 / 1	104	0: 0...63 1: 64...127
Dry / Wet	0 ... 100	105	0 ... 100

Error messages

„DC Fault Amplifier!“
„Overcurrent Fault Amplifier!“
„Overtemperature Warning for Amplifier!“
„Overtemperature Amplifier shot down!“
„Tube Failure Tube 1 damaged!“
„Tube Failure Tube 2 damaged!“
„Tube Failure Both Tubes damaged!“
„Internal Error No response from DSP“
„Internal Memory-Error“

Producer

IMM electronics
Leipziger Str. 32
09648 Mittweida
- Germany -

Approvals::

You can find an overview of approvals on the website.
<https://underdog-audio.de/pages/chuck-downloads>





**THERE IS
ONLY ONE
EARTH
PROTECT IT -
END OF LIFE**



Disposal instructions for the European Union:

In accordance with Directive **RL2012/19/EU** (WEEE - Directive on Waste Electrical and Electronic Equipment), this product must be **recycled** in an environmentally sound manner after use.

Our **WEEE registration number** at the foundation Elektro-Altgeräte-Register (ear) is: **DE 939 24963**.

Please dispose of the **CHUCK** responsibly to help protect the environment!

If **no regulated disposal option** for electronic waste is available, IMM electronics GmbH, as the producer of the “**CHUCK**”, will recycle it for you.

Please send the device to:

IMM electronics GmbH
Leipziger Str. 32
09648 Mittweida
- Germany -

The packaging of the **CHUCK** is made of **environmentally friendly** and **recyclable materials** and can therefore be easily disposed of in accordance with local disposal regulations. This is a simple way to help protect the environment!

