





## BEASTBOX PREAMP V2

USER MANUAL

## INTRODUCTION

Hello from Belarus! We are happy we introduce you the BEASTBOX. It is designed to bring together the best of two contradictory guitar universes: tube amplification and digital sound processing. We believe that tubes are still the best when it comes to constructing tone, while the versatility of IR emulation and MIDI operation can only be achieved only by digital processing.

The Beastbox has three channels - Clean, Crunch, and Lead - as well as switchable FX Loop, IR Amp, and Cab emulation with user-loaded IR files. It also has a Headphones output and supports operation by MIDI. We recommend you read the manual carefully to understand how to use all the features and how to operate the preamp correctly.

Before we proceed, we want to remind you of some important warnings:

BeastBox is a tube device that runs on high internal voltage, so please be careful not to spill any liquids inside it, also avoid putting any parts of your body or other substances into it

Avoid using the Beastbox in dusty or wet areas

For any operation with the tubes, disconnect the power supply and wait at least 5 minutes before proceeding



Input – this is primary instrument input. Connect your guitar or your pedal output with 1/4 TS cable (mono)

FSW – plug in footswitch or switching system with 1/4 TRS cable (stereo) here

Supply – plug in 12V DC power supply (1A min), 5.5\*2.1 plug, center positive here

Send – send signal to modulation pedals with 1/4 TS cable

Return – get back signal from modulation pedals with 1/4 TS cable

Output – send signal to amplifier or to interface with 1/4 TS cable from here

IR Output – send cab-emulated signal to Line or to interface from here

AUX - Connect a backtrack here using 1/8 TRS cable

Phones - connect the headphones here using 1/8 TRS cable

USB - Connect Beastbox to a PC using Mini-USB cable

TF Card - connect a memory card with pre-loaded Irs to this slot

## SWITCHES/INDICATION

Clean/Drive switch – operates with clean/drive channels and lights

Channel/Loop switch – operates with drive channels and FX loop.

Right Stomp LEDs - yellow LED says Clean channel is activated. Blue LED says one of the Drive channels is activated.

Left stomp LEDs - yellow LED says an FX Loop is activated.

Blue LED says Lead channel is activated, no light – Crunch channel is activated.

## TONESTACK

### Upper knobs line

- Gain – sets the gain for Drive channels. Right is more, left is less.
- Bass – sets bass frequencies for Drive channels. Right is more, left is less.
- Bot – shifts tonestack accent to the lower spectrum. Right is on, left is off.
- Mid - sets the amount of middle frequencies for Drive channels. Right is more, left is less.
- High – sets high frequencies for Drive channels. Right is more, left is less.
- Scope – adds hi-middle frequencies for Drive channels. Right is more, left is less.
- Crunch – sets the volume for the Crunch channel. Right is more, left is less.
- Lead – sets the volume for the Lead channel. Right is more, left is less.

### Bottom knobs Line

- Bass – sets bass frequencies for Drive channels. Right is more, left is less.
- Mid - sets the amount of middle frequencies for Drive channels. Right is more, left is less.
- High – sets high frequencies for Drive channels. Right is more, left is less.
- Bright – adds idle-high frequencies for Clean channel. Right is on, left is off.
- Clean – sets volume for Clean channel. Right is more, left is less.
- Presence – adjusts ultra-high frequencies for Drive channels. Right is more, left is less.
- Master – sets the final output volume for the Beastbox. Right is more, left is less.

## IMPULSE SECTION

USB – connection to PC

TF Card – TF card slot

LEDs - indicators for picked IRs

IR - IR selector switch

## HEADPHONES

AUX – input for backing track

Balance – toggle to route your guitar to left/right/both ears

Headphones – output for headphones connection

Volume – wheel for setting the headphones volume

## CONNECTIONS

To get started, follow these steps:

- Connect your guitar to the 1/4 input using a shielded TS instrument cable
- Connect a compatible power supply to the power connector input. The power supply should be 12V center positive, with a minimum of 1A current capacity and a power plug of 5.5\*2.1 mm
- Connect at least one of the following:
  - Output and your amplifier's/interface's input
  - IR Output and your mixer/interface's input
  - Headphones into the headphones jack
- Wait for about 20 seconds for the tubes to warm up. The first sound should come out after this time

## CHANNELS

### CLEAN

When you turn on the Beastbox, the Clean channel is activated, and a yellow LED near the right button lights up.

You can also turn on the Clean channel by using the footswitch or MIDI commands.

Please refer to the MIDI section for instructions.

To set up the desired Clean tone shape, use the EQ controls. The Clean knob sets the clean volume coming to a second tube stage. You can drive your clean to a deep compressed tone or even add a slight overdrive. The Bright switch adds idle-high frequencies, which may be appreciated by humbucker-based guitar players.

### DRIVE CHANNELS

To activate the Drive mode (Crunch / Lead), press the Right button. The blue LED near the Right button will light up, indicating that the drive mode is activated. The blue LED near the Left button indicates the Lead is selected as the Drive channel. No light from this LED means the Crunch is chosen as the Drive channel.

You can also turn on the Lead and the Crunch channels using the footswitch or MIDI commands. Please refer to the MIDI section for instructions.

To configure the desired Crunch and Lead tone, use the Gain, EQ controls and toggles. Crunch and Lead channels has separate volume controls, while other knobs and toggles are shared for both channels. The Bot toggle enhances low-frequency sounds, and the Scope reduces high-mid frequencies.

### FX LOOP

To activate the FX Loop, press and hold the Left button for 2 seconds. This will switch the Left button function from controlling the Drive channels to controlling the FX Loop. To turn the FX loop on or off, press the Left switch. To return to channel operation, press and hold the Left button again for 2 seconds.

You can also use the footswitch or MIDI commands to control the FX Loop. Please refer to the MIDI section for instruction.

Engage your modulation chain (reverb, delay, chorus, etc.), using a ¼ TS patch cables. Keep in mind that the Clean, Crunch, and Lead Volumes control the amplitude before the FX Loop, while the Master controls the volume after the FX Loop.

Be careful not to overdrive your modulation devices connected to the FX Loop. Some devices can handle high input levels without limiting, while others may start to distort the passing signal. In case of this happens, decrease channels volume.

## IR EMULATION

The Beastbox offers an advanced IR simulation feature that lets you emulate an Amp, a Cab, or even both at the same time in any combination. This feature enables you to play on the BeastBox with the same feel as a real guitar stack. You can load up to four amp impulses and four cab impulses to the internal IR player. The Beastbox supports \*.wav IR files in a 24-bit 48 kHz format.

You can either load IR files directly to the internal Beastbox memory or connect a TF with loaded Irs.



## IR LOADING

### To the internal memory

To load IR files into the internal memory, please follow these steps:

- Ensure that the IR files are in the correct format: \*.wav, 24 Bit, 48 kHz
- Connect the Beastbox to your PC using a mini-USB cable. The preamp should appear as a flash card named "Beastbox"
- In the Beastbox root folder, you will find the "Amp" and "Cab" folders. The "Amp" folder contains A1 to A4 subfolders, while the "Cab" folder has C1 to C4 subfolders
- Load the impulse files into the dedicated subfolders. Each subfolder should contain only one impulse file
- Eject the Beastbox from your PC and disconnect the cable from the preamp

### To the external TF card

To load IR files into the external TF Card, please follow these steps:

- Connect the TF card to your PC
- Check if the TF card has FAT32 formatting. If not, format it in this format
- Create the same folders as the internal BeastBox memory has. These folders include: "Amp" and "Cab" folders in the root folder, four "A1...A4" subfolders in the "Amp" folder, and four "C1...C4" subfolders in the "Cab" folder
- Check the format of your impulse files. They should be in \*.wav format, 24 Bit, 48 kHz
- Load the impulse files to their respective sub-folders. Each subfolder should contain only one impulse file
- Eject the TF card from your PC
- Connect the TF card to the BeastBox. Once the card is connected, the IR player will use impulses from the TF card.

## SELECTING IR FILES

The left LEDs column "Amp" corresponds to the "A1...A4" folders. The right LEDs column "Cab" corresponds to the "C1...C4" folders. To switch between columns, press and hold the IR switch for 2 seconds.

Another thing to enhance the versatility of your gear is the possibility to link the IR files for each channel.

The IR folders are linked to the channel you selected them on. For instance, if you choose the Amp 1 and Cab 2 folders while the Clean channel is active, then every time you switch to the Clean channel, the IRs from the Amp 1 and Cab 2 folders will be used. Same thing with the Crunch and the Lead channels.

You can also select IR files on the go using MIDI commands. Please check the MIDI section for instructions

## HEADPHONES

To use your headphones with the Beastbox in the ~~best~~ best way, follow these steps:

- Connect your headphones (16-600 ohms) to the 1/8 stereo jack
- If needed, connect the backtrack to the AUX input using a 1/8 TRS cable. You can find a variety of backing tracks or drum tracks on YouTube, etc.
- Route your guitar to the Right/Left/Both ears with the Balance toggle. This doesn't affect on the signal coming from the AUX
- Choose the optimal cab and/or amp impulses for your headphones
- Adjust the headphopnes volume to desired level using the wheel near the headphones jack

The IR player section produces a constant amount of output white noise that doesn't depend on the volume coming into the IR section. To negotiate the noise effect in the headphones, follow these steps:

- Connect your headphones
- Set the headphones volume to the minimum position
- Set the channels volume to the middle position.
- Set the Master volume to the middle position
- Slightly increase the headphones volume while playing you guitar with the other hand, until you hear a distinct sound
- Start to increase the Master to the point where distortion appears. Don't worry, this won't damage your preamp or headphones
- If you don't reach distortion, increase the channels volumes too
- When you finally reach the limit, slightly decrease the Master. That's it, you found the maximum level the IR section can operate without limiting
- Set the desired headphones volume using the wheel

As each guitar has its unique pickups, strings, etc., this procedure cannot be performed by us and needs to be done at your side.

## Footswitch

To operate with the Channels and the FX Loop, you can also connect a footswitch or switching system/processor to the footswitch input using a TRS ¼ cable.

To switch between Clean and Drive channels, short the Tip and GND contacts for a moment. If you want to switch between Crunch and Lead channels, short the Ring and GND contacts for a moment. To turn the FX loop on/off momentarily short the Tip and Ring to GND at the same time.

MIDI Operation

The Beastbox can be connected to MIDI systems and could be configured to respond to channels 1 to 8. It supports Continuous Controller (CC) and Program Change (PC) type messages.

The following functions can be controlled:

- Channel selection (CC)
- FX loop switching (CC)
- Master volume adjustment (CC)
- Amp and Cab IR folders selection (CC)
- Presets recall (PC)

To begin, let's set the MIDI channel for the Beastbox:

- Press and hold the MIDI switch while powering up the preamp. The IR LED indicator will display the current channel that Beastbox is settled to, where A1 represents channel 1 and C4 represents channel 8
- To change the channel, press the IR switch
- Press the MIDI switch to save changes and return to standard operation.

That's it!

Please note that you are setting the channel for both CC and PC messages.

MIDI map

Function	Message Type	First Byte Value	Second Byte Value
Master Volume	CC	7	0-127
Clean ON	CC	20	Any Value
Crunch ON	CC	21	Any Value
Lead ON	CC	22	Any Value
FX ON	CC	23	0-64
FX OFF	CC	23	65-127
Amp IR Select	CC	24	0 - 4 (0 - Bypass)
Cab IR Select	CC	25	0 - 4 (0 - Bypass)
Preset Select	PC	1	0-7

Opetating with PRESETS

The Beastbox can save up to 8 presets to its internal memory. Each preset includes the following parameters:

- Channel (Clean/Crunch/Lead)
- FX Loop status (On/Off)
- Master volume level
- Amp IR folder number
- Cab IR folder number

To save/change the preset, follow these steps:

- Activate the desired Channel (Clean/Crunch/Lead)
- Set the FX Loop status (On/Off)
- Set the Master volume
- Select the Amp IR folder (or bypass it)
- Select the Cab IR folder (or bypass it)
- Press the MIDI switch to activate the Preset Safe mode
- Press the IR switch to select the sell to store the current preset
- Press the MIDI switch to save preset to chosen cell and return to standard operation

PC 0...7 commands will recall a preset saved in A1...C4 sells.

Please note that if you change the Master volume through MIDI, it will set the volume regardless of the actual Master knob position. If you want to change the Master manually, you should rotate the Master knob.

SPECIFICATION

01. Input Impedance: 1 mOhm
  02. Output Impedande (Send/Output/ IR Output): 1 kOhm
  03. Return Impedance: 1 mOhm
  04. AUX impedance: 22 kOhm
  05. Headphones output power: 200 mW / channel
  06. Power consumption: 12V- 1A, 12W
  07. Power adapter specification: 100-240V input, 50-60 Hz, 12V, 2A, 5,5\*2.1 plug, center positive
  08. Preamp Dimensions: 5\*5\*5
  09. Preamp Weight:
- We put the right to make a unnoticed imrrovements on the preamp and the manual.  
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