

# HARVEZI HAZZE

## OPERATION MANUAL

Harvezi Hazze is a versatile and quite unique distortion pedal with a wide tonal palette. The heart of Harvezi Hazze is a waveshaper designed around a unijunction transistor, a relic from the early days of the semiconductor industry unearthed from the e-waste bins of flea markets in Tbilisi, Georgia. The unique properties of the unijunction transistor allow one simple component to replace a number of very complex devices: depending on the operating mode, we can get a distortion, a limiter, a waveshaper and a generator—with a smooth transition between them. Experiments have shown that this transistor is an excellent basis for a distortion stompbox. The name translates from Georgian as „a fault on the transmission line“ or „signal jamming“, and both the semantic and phonetic natures of it unequivocally imply what to expect—an impediment to the input signal, ranging from pleasant harmonic distortions to complete obliteration. The signal chain of the unit consists of an optical compressor with fixed parameters; a dual-mode distorting amplifier with either softer or harsher clipping; a waveshaper built around a unijunction transistor; and a tone stack section trying to tame all this mess.

### SIGNAL CHAIN

INPUT → COMPRESSOR → DISTORTING AMPLIFIER → WAVESHAPER → TONE STACK → OUTPUT

### CONTROLS

**GAIN** — controls the output amplitude of the signal in the distorting amplifier section. Depending on the position of the switch, the distortion introduced by this section is soft (switch in the left position) or more aggressive with an abundance of high harmonics (middle position).

**SPOIL** and **SPREAD**—control the operation of the unijunction transistor (waveshaper section). **Spoil** sets the point on the amplitude axis at which the wave will fold, and **Spread** sets the amplitude of the folding. The sonic meaning of these knobs can be described as follows: the higher the **Spread** value, the more severe the distortion will be, and **Spoil** changes timbre and response threshold. By adjusting **Spoil** you can achieve various gating and cutoff effects. At low **Spread** values, distortion sounds are mixed into the clean sound.

**TONE** — adjusts the brightness of the sound; the higher the value, the more high harmonics are present in the signal.

The **SWITCH** regulates either the distortion mode in the amplifier section (left



and center positions), or it turns on the total feedback mode (right position), when the values of all knobs begin to influence each other and effects occur such as resonance at certain frequencies and self-oscillation.

**LEVEL** — controls the output volume of the signal.

The **FOOTSWITCH** routes the signal through the effect circuitry or from input to output directly (**true bypass**).



*The array of switches on the side of the unit gives a few more tonal options:*

**TONE STACK** — routes the signal through the tone stack section (Tone knob).

**BASS BOOST** — enhances bass frequencies.

**TONE MODE** — changes the behaviour of the Tone knob (tilt or lowpass).

**NOTCH FREQ** — changes the central frequency of the filter.

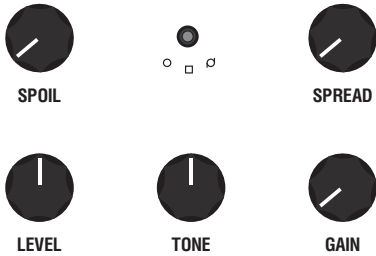
**HIGH CUT** — attenuates high frequencies.

**COMPRESSOR** — routes the signal through the compressor.

*The lower position of the switch enables the function.*

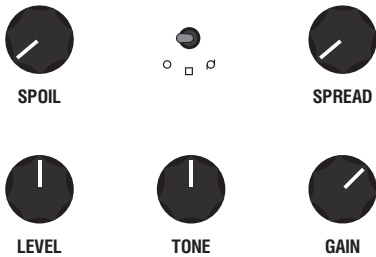
## EXAMPLES

### Compression



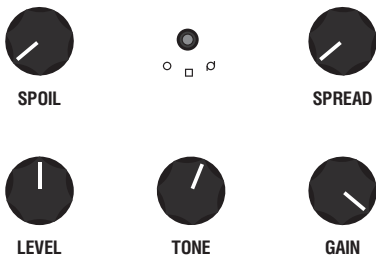
- TONE STACK
- BASS BOOST
- TONE MODE
- NOTCH FREQ
- HIGH CUT
- COMPRESSOR

### Soft clipping



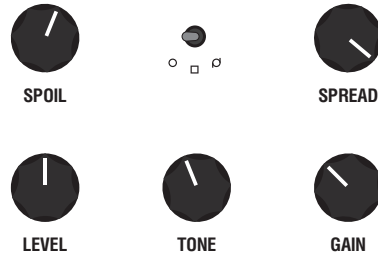
- TONE STACK
- BASS BOOST
- TONE MODE
- NOTCH FREQ
- HIGH CUT
- COMPRESSOR

### Distortion



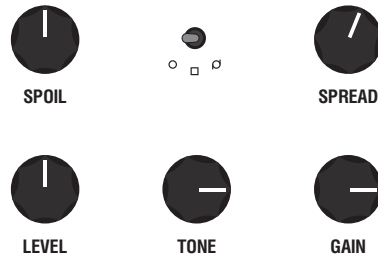
- TONE STACK
- BASS BOOST
- TONE MODE
- NOTCH FREQ
- HIGH CUT
- COMPRESSOR

### Fuzz



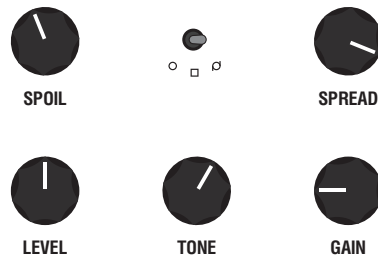
- TONE STACK
- BASS BOOST
- TONE MODE
- NOTCH FREQ
- HIGH CUT
- COMPRESSOR

### Black



- TONE STACK
- BASS BOOST
- TONE MODE
- NOTCH FREQ
- HIGH CUT
- COMPRESSOR

### Feedback



- TONE STACK
- BASS BOOST
- TONE MODE
- NOTCH FREQ
- HIGH CUT
- COMPRESSOR

## TECHNICAL SPECIFICATIONS

Input . . . 1/4-inch/6,35 mm mono jack  
Input impedance . . . . . 750 kOhm  
Output . . 1/4-inch/6,35 mm mono jack  
Output impedance . . . . . 100 Ohm  
Power. . . . . DC 9V, 50 mA,  
DC jack 2.1 mm, centre negative  
Dimensions . . . . . 130x115x40 mm  
Weight . . . . . 0.78 kg  
True bypass

## CREATED BY

**Andrzej Slovik**—production organizing and control.

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**Vladimir Kornienko**—beta-testing, performance.

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**Thomas Lundberg**—communication, utopian linguist, proofreader.

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