

Joit - A superb sonic device for the working musician

The Unit67 is a compact and fully analog device that has a highly versatile EQ set including a "Rangemaster-like" mid control, a boost and an 1176's type of compressor - all in one extremely practical guitar pedal.

INTRODUCTION

Thank you for purchasing the Unit67 pedal from DryBell, Croatia.

Imagine getting THAT sound you have in your head from just one pedal. You know that playing feel when you play through a loud or overdriven amp, when every note comes out easily and you can play effortlessly? Well, that's what the Unit67 is all about, only you don't have to play LOUD or with an overdriven sound to get there. Unit67 is a sublime combination of several different effects working in perfect synergy. Our newest creation has low noise circuitry and is fully analog in design.

Note: In each section of this manual, you will find a practical example for using each control.

BOOST (the big pointer knob) 1

The legendary Daka-ware knob adjusts the output signal level. Its size and placement also makes foot control possible. The lightning strike mark at 10 o'clock represents unity gain zone (0dB). Turned fully CW, the gain of the boost stage is 22,4dB (with the EQ turned off). The input signal level can be reduced up to 7dB at minimum setting (-7dB turned fully CCW). The high headroom boost stage has a custom designed taper to help you easily find a sweet spot with any device or amp that you are connected to. It works internally at 23V and can send a very high signal level to the pedal's output (see technical specifications).

Note: The Boost stage is designed to be a semi-clean boost. The reason behind it lies in the nature of how guitar amps work. When you boost the guitar amp with a full-range signal, you can get a lot of unnecessary treble and bass. That's why this output stage has carefully tuned bass and treble frequency roll-off at the higher gain settings (more than 1 o'clock).

SUSTAIN (small pot) 2

The Unit67 has a built in compressor/limiting amp. The SUSTAIN adjusts parallel compression level and you can easily set the mix of dry/compressed signals, getting the right amount of sustain while retaining pick dynamics. Turn the SUSTAIN knob fully CCW for 100% dry signal, or fully CW for 100% compressed signal. Our very own low noise FET compressor stage is inspired by the legendary UREI 1176 studio compressor. Note: In this single knob design, parameters like Attack, Release and Ratio are fixed internally, but VERY carefully chosen based on many years of playing experience. We've set them at very specific values to get the pedal's superb dynamic response.

INPUT (toggle switch) 3

The nominal input level of the pedal is optimized for guitar or devices with similar output levels. Depending on your playing style or pickup type, with the INPUT switch you can select two types/gains of compression: Low (+4dB gain, lower compression) and High (+10dB gain, long sustained notes). The switch changes preamp gain and because of that, the threshold level (the input signal level where the pedal starts to react) is also changed. The result of this is two very different compression characters.

Note: By combining the Input switch and Sustain controls you can get a WIDE range of different compressed tones and it will sound great at any of the pot's positions.

EQ (toggle switch) 4

With the EQ switch you can engage/bypass the Unit67's EQ section. The EQ section contains 3 controls: RANGE, LOW and HIGH. The EQ section is engaged on position "1" or hard bypassed on position "0". This switch is useful for exploring the tonal differences between the engaged/bypassed EQ section. Also, if you want to use the compressor feature on its own, you can keep the EQ switch off.

Note: Combining EQ and BOOST can result with a maximum pedal gain of 41dB in the mid-range frequency spectrum.

RANGE (small pot) 5

"The Range" controls a specific mid-range frequency spectrum, very similar to the old classic "Rangemaster". In certain situations, when you're using darker-toned amps or guitar pickups, "The Range" will add harmonically rich sparkle to your tone. Also, combined with a touch of sustain and boosted just enough to give you THAT tone, "The Range" will give some serious bite to the final sound which is another way to push you through the mix while playing lead. Unity gain is at 12 o'clock.

Note: The Unit67's features combined together reward you with lots of impressive tones.

LOW & HIGH (small pots) 6, 7

LOW (6) controls the low frequencies from -15,8dB up to +9,3 dB. HIGH (7) controls the high frequencies from -13,2dB up to +7,2dB. They are not symmetrical tone controls and both knobs have unity gain position at approx. 12:30.

BYPASS SYSTEM (footswitch, LED) 8, 9

The pedal has a buffered bypass. Each time you press the footswitch (8) the effect is turned ON or OFF. When the effect is active, the red LED (9) will always light up and also it has a nice fade-in/fade-out operation. The bypass system has a built-in high headroom, ultra-low noise buffer circuit, designed to have no signal loss unlike most classic transistor buffered pedals.

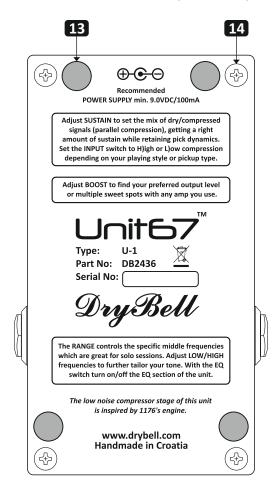
INPUT and OUTPUT (jacks) 10, 11

The input is on the right and the output on the left side of the pedal.

POWER SUPPLY (no battery, power supply only) 12

We recommend an unregulated or regulated 9-18V DC PSU with the minimum of 100mA (not included). If you use more than 9V, the Unit67 will generate more heat and that's perfectly normal. Different power supply voltages don't affect the tone or internal headroom of the pedal. The power consumption depends on the level of the input signal, e.g. for guitar level the current consumption is about 87mA. If you connect another device with a higher output than an electric guitar, we recommend using a power supply with 150mA output. The Unit67 has internal protection against reverse power polarity and static discharges.





PACKAGE CONTENTS

The Unit67 U-1 pedal, four rubber feet (13) and user's manual.

TECHNICAL SPECIFICATIONS:

Max gain (EQ = off, Sustain = 0): 22,4 dB

Max gain (EQ/BOOST on max): 41,0 dB (mid-range freq.)

External power supply: Adapter 9V DC, (9.0Vmin - 18Vmax), 100mA minimum

Power supply connector type: Barrel, Plug 5.5mm/2.1mm, Center

Negative

Nominal current (with guitar): 87mA

 Length:
 112 mm
 / 4,42 inch

 Width (W/O jacks):
 60 mm
 / 2,37 inch

 Height (W/O knobs):
 31 mm
 / 1,22 inch

 Weight: (W/O package):
 0,28 kg
 / 0,62 lb

 Weight: (with package):
 0,36 kg
 / 0,79 lb

Standard color/finish: Silver metallic matte / Powder

Coating

CONTACT:

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2 YEAR WARRANTY

DryBell M.E.L. guarantees that this product will work without defects in materials or craftsmanship, for a period of two (2) years from the date of purchase. If a defect occurs within the warranty period, it will be repaired as soon as possible, free of charge. If the product cannot be repaired and the model is no longer produced, the product will be replaced with a current model or in agreement with the buyer, with a similar product. DryBell will extend the warranty period for the duration of service failure if it is not repaired within 30 days (not including transportation time). If the original buyer sells the product to a new owner, the warranty transfers to the new owner. All transportation costs for the service within the warranty period are paid by the owner of goods. This warranty covers manufacturing defects that occurred while the product was used according to DryBell's recommendations and instructions. The warranty does not cover loss or theft of products, and excludes failures caused by misuse, mechanical damage, liquid damage of any kind, being dropped, unauthorized modification, shock surge in electricity supply, lightning, improper storage and natural disasters. DryBell assumes no liability for any damages/injuries resulting from the use of this product. In using this product, the customer accepts the terms and conditions set out above. There may be occasional updates on this product; please visit www.drybell.com to find these.



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For more information about how we created this circuit, you can read "About Unit67" document on www.drybell.com.