



THE MOCKER

**USER MANUAL &
SAFETY INSTRUCTIONS**

Thank you for purchasing The Mocker.
The fuzziest side of Vox UL730
for Mods & Rockers

aclam 

www.aclamguitars.com

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Overview

In September 2017, after months of gathering and searching through the internet, we were extremely lucky to find and buy an original VOX UL730 with serial number 3042, the amp The Beatles used on Revolver. After a careful restoration, layout tracing, and further circuit analysis, we developed the Dr. Robert pedal. It was the closest replica we could create of its unique sound and amazing saturation, caused when you turned the amp's volume all the way up.

We packed a lot of features into the pedal, including inner EQ controls and the Mach Schau! switch. An extra gain boost for solos and heavier parts, making the Dr. Robert a super versatile overdrive, perfect for nailing those Revolver guitar tones.

But the amp had another hidden gem...

The UL amp series was the first Vox amps to feature a built-in "distortion" circuit controlled by a footswitch, one of the first ones to use shunt diodes, also known as hard clipping to saturate the guitar's signal. Although they named it distortion, the resultant tone was closer to a fuzz than what we understand nowadays as a distortion pedal.

When we got our own UL730 working after restoring it, we tried to match tones found in the Revolver album, but we couldn't find a similar one using the internal fuzz. It sounded kind of gated and spluttery, which was

really cool, but no song on the album was close to it, so we focused on creating a device that recreated the tube's saturation and abandoned the idea of including the fuzz circuit in the Dr. Robert.

Eventually one day, we came across a Youtube demo where a Vox UL730 was being showcased, and its fuzz tone was nothing like our amp. It had a lot more sustain with no gated component, which made us wonder what was the cause of such a dramatic difference. We reopened our UL730 and after checking several components in the circuit, we found the culprit! As time passes, some components lose their properties and shift their value out of their specified tolerances. That led to an underbiasing of the fuzz circuit and caused that starving and gated tone!

While we were re-analyzing the amp, we looked for the same diodes used on the UL series and found a surplus lot of 400 N.O.S Phillips OA200 diodes, a very rare component only used on that amp series. We couldn't believe how lucky we were, because that meant that at least we could make a small run of fuzz pedals!

With the mystery solved and the right component in hand, it was time to create what would become The Mocker!

As we found both sounds equally cool and useful, we developed a prototype which featured a bias knob to dial between a great variety of textures, from gated to

compressed tones. In addition to that, we included a tone control, so The Mocker would be more compatible with many amps and guitars. The Mocker is an extended version of the original Vox UL series fuzz circuit while retaining its essence. You'd nail Beatles tones from that '66-'67 era (especially if you pair it with a Dr. Robert), but it will also delight any player seeking a signature sound! We ourselves are amazed at the versatility of the Bias knob, capable of making The Mocker land on so many musical terrains, from vintage to modern ones, all with just a few controls; you won't miss a gain knob!

The graphics inspiration came from the Sgt. Pepper's Lonely Hearts Club Band album since the eponymous song that opens the record has a lead guitar intro, which was likely recorded with the UL fuzz. We couldn't resist painting The Mocker with a Hammerite finish, the same used on most British fuzz boxes of that period and also used on the VOX UL series footswitches.

As the very Ringo said on A Hard Day's Night, this pedal it's not a Mod nor a Rocker, it is The Mocker!

Features

ACCURATE REPRODUCTION OF THE VOX UL SERIES INTERNAL FUZZ CIRCUIT:

The Mocker is a faithful replica of our own VOX UL730 amp (S/N: 3042), we measured each component involved and fine-tuned the circuit to match our own amp.

EXTENDED SONIC RANGE AND TEXTURES THANKS TO THE BIAS AND TONE KNOBS:

The original amp's fuzz circuit is controlled via an external footswitch and has no knobs; it is a preset effect. Due to component degradation and tolerances, our UL730 had a gated behavior attributed to an under-biased transistor. We implemented a Bias knob to recreate that effect, and get many more textures, from a plenty of sustain sound to a compressed and creamy tone.

There's also a Tone knob to make it even more versatile and friendly with different guitars and amps!

N.O.S PHILLIPS OA200 DIODES, THE VERY SAME DIODES FOUND ON THE UL AMP SERIES:

We've been lucky to find a surplus lot of 400 rare OA200 diodes, a key part of the Vox UL700 and 400 fuzz tone!

GRAPHICS INSPIRED ON THE SGT PEPPERS LONELY HEARTS CLUB BAND AND HAMMERED FINISH PAINT:

Since the Vox UL730 had been used on Sgt Peppers too we thought it'd be cool honor its artwork. Also the enclosure has a beautiful hammered finish paint, used

on many fuzz boxes of that period and also on the UL's footswitches.

ULTRA SILENT TRUE BYPASS RELAY SWITCHING:

We've made an effort to make the transition from bypass to on as silent as possible. You won't hear any popping noise in the audio path every time you press the footswitch, no matter how quiet the playing environment would be.

SMART TRACK® FASTENING SYSTEM:

All our pedals use a custom enclosure designed to perfectly match our Smart Track® pedalboards. Using the side thumb screws, you'll be able to lock safely the stompbox into one of our pedalboards. It also was designed with the other pedalboard options in the market in mind. (see page 21)

Specs & Material included

THE MOCKER REF:

AP0050

DIMENSIONS:

13,7 x 8,8 x 5,5cm (5.4" x 3.4" x 2.2") with knobs

WEIGHT:

410g. (0.90 lb)

BYPASS:

Relay True Bypass

POWER REQUIREMENTS:

9V DC Center Negative 50mA minimum

CURRENT DRAW:

≈12mA

DECLARATION OF CONFORMITY:

This product complies with the requirements of



MADE IN SPAIN

MATERIAL INCLUDED

1 x The Mocker pedal

1 x Anti-sliding rubber pad

1 x Velcro® pad

Power requirements

POWER SUPPLY

This unit must be powered with a 9VDC negative tip power supply with the standard Boss type 2.1mm connector.

Current supply should be a minimum of 50 mA just to leave a safety margin for the DC adapter.

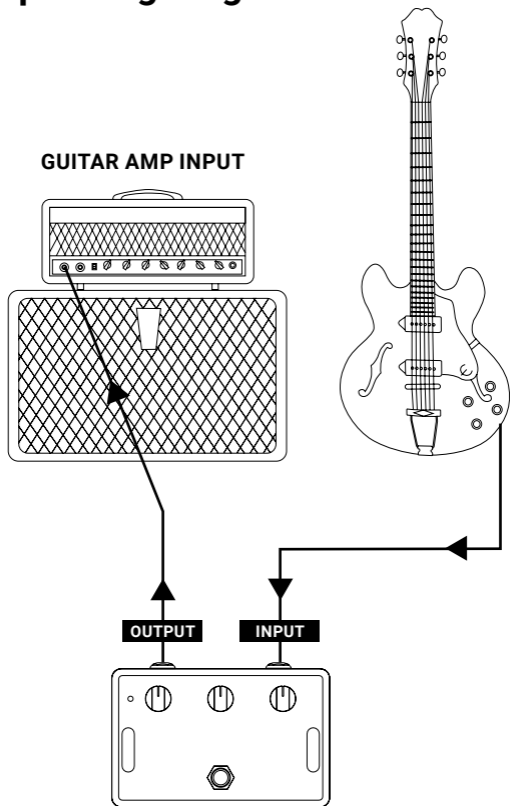
Make sure you use a good quality power supply and avoid using generic SMPS type adapters which can induce high pitched noise to the audio.



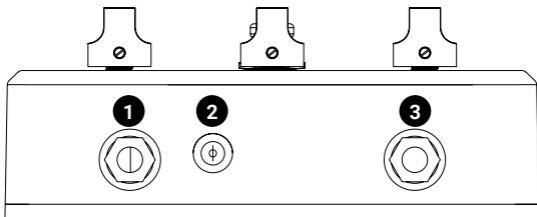
CAUTION:

Please note this pedal **MUST** not be powered with any voltage above 9VDC. Powering it up with a 12V or 18V power supply will damage its circuit and immediately void the warranty.

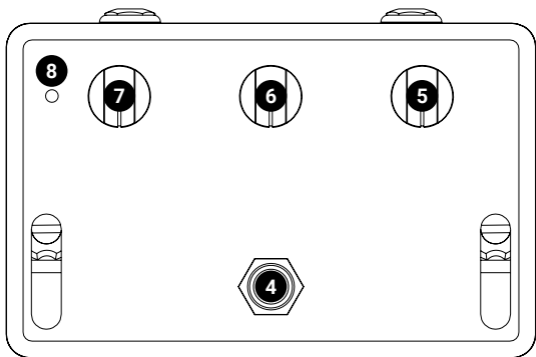
Operating Diagram



Controls



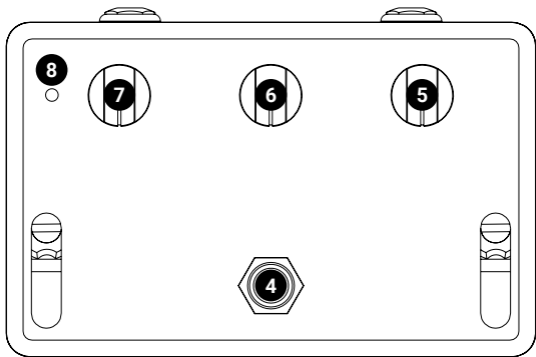
- 1** INPUT JACK
- 2** POWER JACK
- 3** OUTPUT JACK



4 BYPASS SWITCH: Engages the unit allowing the signal to flow through The Mocker circuit. It also lights up the LED on the upper left side of the pedal, close to the Vol control.

5 BIAS: This knob lets you fine tune the operating point of The Mocker's second transistor. Tweaking this control will let you obtain a wide range of textures and will change the fuzz behavior and response to your playing dynamics.

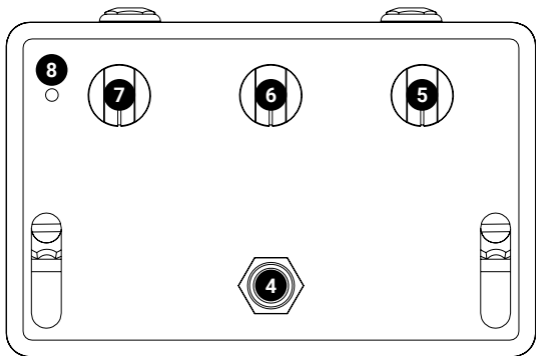
By turning it counterclockwise the fuzz will be gated and spluttery causing notes to decay quickly quickly to dead silent. You'll have to play hard in order to activate



the second transistor and let the signal pass through it. This kind of behavior is the one found on our VOX UL730.

As you start to turn it clockwise the gated behavior will transition to a more open tone with plenty of gain and sustain, close to a typical distorted tone but with that fuzzy character. This ideal for riffs and will be quite suitable for palm mute playing. This is the tone the VOX UL series had when they got out of the production line in 1966.

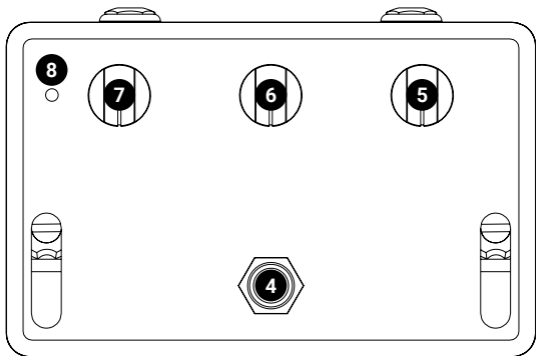
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As you keep turning the knob until you turn it all the way up, sound will become more compressed and with a sort of PWM component, ideal for high gain solos and lead parts. This is also a new terrain for this circuit since it wasn't meant to sound like this, it will let you explore new sonic registers no one at that time knew where possible with the UL internal fuzz!

You may hear some crackle turning the Bias knob. This is completely normal since it sets the circuit's DC bias



6 TONE: The original Vox UL series amp's fuzz had a preset low pass filter. We've replaced the fixed resistor in that part of the circuit with a potentiometer so you can make it sound brighter or darker depending on the instrument and/or amp you're playing. Turn it clockwise to make it sound brighter.

7 VOL: Controls the overall volume of The Mocker.

8 BYPASS LED: It lights up when the unit is engaged.

Setting Samples

The Bias knob in conjunction with the Tone control make The Mocker a really versatile fuzz, we recommend you trying the following setting examples. These suggestions do not show specific positions for the VOL as it will depend on the output of the guitar you use. We recommend you to starting with VOL knob at 11 o'clock and adjust it to match unity gain of the unit bypassed. This way you can make sure you're not overloading the amp's preamp and all the saturation comes from The Mocker.

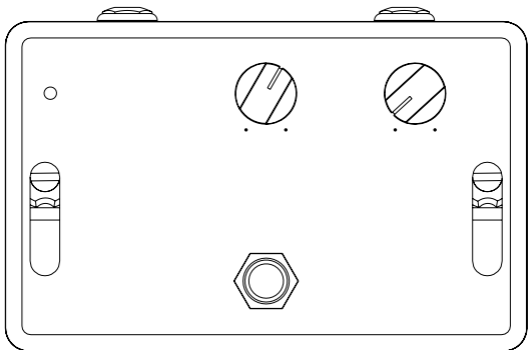
You'll find some settings where there's no specific position for the TONE control. This is because it will depend on your rig to fine tune The Mocker's brightness and suit your preferences.



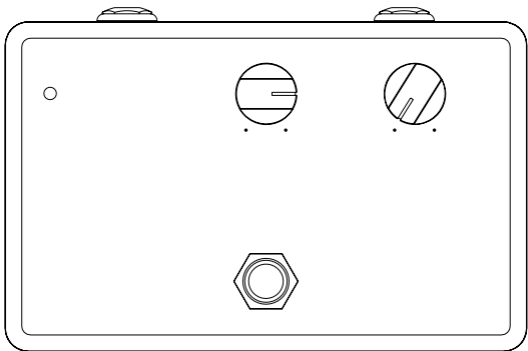
CLICK HERE TO LISTEN
TO THE MOCKER
SUGGESTED SETTINGS

*All samples played with:
1966 Epiphone Casino
Vox AC15C1*

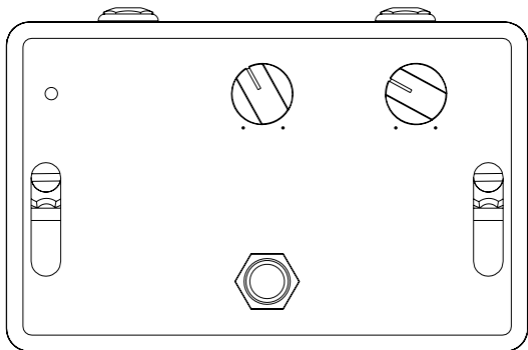
UL730 S/N: 3042



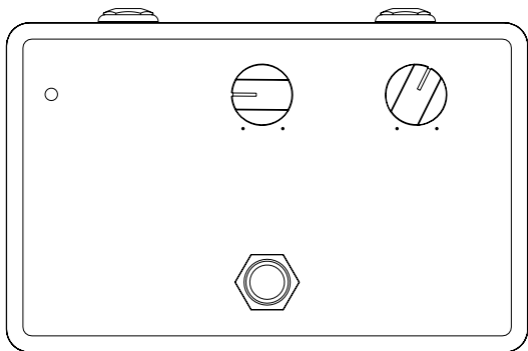
GATED FUZZ



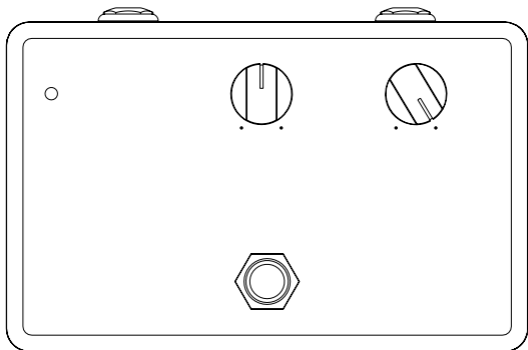
FACTORY UL730 / SGT. PEPPER'S LEAD INTRO



LIGHTLY COMPRESSED FUZZ



HEAVILY COMPRESSED FUZZ



SCAN OR CLICK
TO WATCH
THE OFFICAL
DEMOS



Setting up on a pedalboard

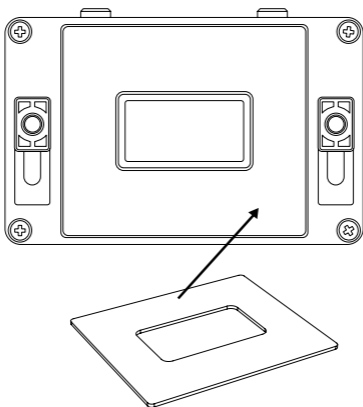
All our effect pedals use a custom light aluminum enclosure specially designed to fit our Smart Track® pedalboards. We incorporated a proprietary locking system which allows the user to fasten the pedal without the need of using the typical hook and loop method. This custom fastening system follows the same philosophy behind the Smart Track® fasteners but integrated in the enclosure reducing the space occupied by each pedal.

That translates into more pedal density for the same space, and who doesn't want that?

We strongly recommend you to take a look at our line of pedalboards, which are the best complement to our pedals!

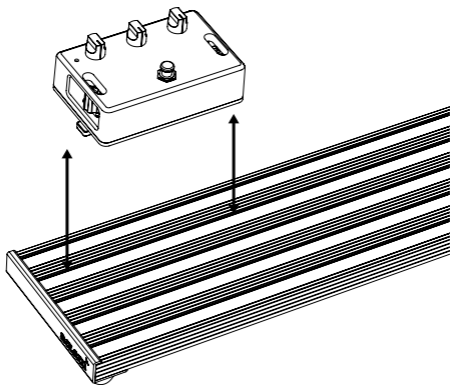
HOW TO MOUNT IT ON A SMART TRACK® PEDALBOARD:

- 1** Add the anti-sliding rubber pad at the bottom of your pedal, specially shaped for this unit.
! Surface must be clean and dry before applying adhesive pad.

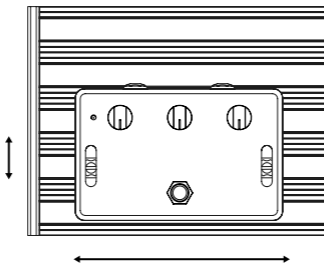


- 2** Loosen the 2 thumb screws to unlock the bottom pieces out of the pedal.

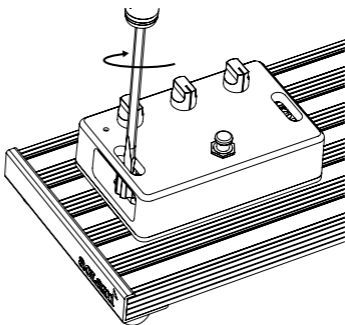
- 3** Place the pedal, inserting the bottom pieces inside the grooves.



- 4** Move the pedal to its final position.



- 5 Tighten the two thumb screws with your hands or with a screwdriver.



USING OTHER PEDALBOARDS:

Hook and Loop: Take the included super strong Velcro® pad and stick it on the base plate.

Again, make sure the base is clean of dirt and dust.

Pre-drilled pedalboard: Fix it with a bolt and a nut you could find at any hardware store or instead of passing the zip tie over the pedal you can take advantage of the Smart Track® enclosure and put the zip ties over the holes.

DIY woodboard: You can screw the pedal directly with wood bolts through the enclosure side holes.

No board: If you use the pedals standalone make sure you place the included anti-sliding rubber pad on the baseplate.

Troubleshooting

SIGNAL PASSES THROUGH IN BYPASS BUT NOT WHEN ENGAGED:

Make sure you've connected the input and output jacks correctly and are not reversed.

PEDAL DOES NOT WORK WITH THE POWER SUPPLY:

Take a look at your power supply output voltage and polarity. Make sure it's 9V DC negative tip with a minimum output of 50 mA.

Security Instructions

- Read these instructions carefully.
- Keep them for future reference.
- Heed all warnings.
- Aclam Guitars shall not be held liable for any damage to persons or property caused by incorrect operation or installation.
- Use the product in accordance with the assembly instructions. Do not modify or operate the product incorrectly.
- Incorrect installation could result in serious damage to persons and property.
- Open the package and check that the assembly instructions and all the parts of the product are there. Check that none of the parts are defective.
- Keep out of reach of children. This product contains small parts that represent a choking hazard if swallowed.
- If you do not understand these safety instructions, or if you have any queries regarding the safety of the installation, please contact Aclam Guitars:
support@aclam.cat
- If you wish to contact Customer Services at Aclam Guitars, please write to support@aclam.cat

Warranty Terms

This product is covered by a two-year warranty from the purchase date, under the conditions and supporting evidence regulated by current Spanish Legislation.

The product warranty will only be applicable by presenting the proof of purchase (which is the invoice or the receipt) and serial number.

A product is covered under warranty if it presents lack of conformity because it does not correspond to the specified product characteristics, is defective which prevents its normal use according to its purpose, or does not function as described. The purchaser has the right to have the article repaired or replaced (either the product or the faulty component, at the discretion of the manufacturer.)

The warranty is not transferable and won't cover the following issues:

- Attempts of modifications or repairs by an unauthorized service center.
- Unsuitable use
- Incorrect storage
- Explosions or burns caused by incorrect power supplies.
- Other causes not attributable to the manufacturer.

To make a claim, the purchaser must return the product to the store where it was purchased within one month from discovering the fault, and report the nature of the

problem, the time and the circumstances under which it occurred.

If the product was purchased through our website, the purchaser must refer to www.aclamguitars.com and complete an RMA (Return to Manufacturer Authorization) form before returning the unit.

We strongly recommend looking at the “Troubleshooting” section of the manual before panicking!!



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www.aclamguitars.com