

# Welcome to the Meatball™

**THIS MANUAL CONTAINS  
IMPORTANT SAFETY  
INSTRUCTIONS -  
PLEASE READ BEFORE USE!!**

The Meatball™ is an envelope follower/triggerable filter and favourite alternative to a high fibre diet. To get the full benefit of its huge potential, and to avoid unnecessary flailing, **it is essential to understand how the controls work together** so the manual will unfortunately be required reading! If all else fails then consult the fairly idiot-proof sample settings at the back. These provide good starting points which can be seasoned to taste.

The problem with standard triggered filters is that they only have one response curve, which is very restrictive and can tend to dominate the player rather than the other way round. The Meatball™ however is an extremely versatile device which can be tailored to respond accurately and expressively to almost any playing style by virtue of its highly interactive controls. While being able to produce the subtlest of effects, we have not tamed the beast and its excesses. It has many innovative features and while it can produce all the classic auto-wah sounds it can go far beyond these to offer a vast array of unique new possibilities, many of which are not normally associated with this type of effect. Whatever the sound, it will always retain the unmistakable warmth and character of analogue circuitry.

The Meatball™'s large dynamic and frequency range (everything from thunderous sub bass to frazzle) makes it compatible with any electric or mic'ed instrument and also with general studio use (at line level) as a stand-alone fx unit. It can become an analogue synth in its own right by filtering simple waveforms (from a sampler or other keyboard for instance). It can be used as an aural exciter to add depth and sparkle, particularly to lifeless digital samples.

**WARNING!! The Meatball™ can generate seriously huge levels of sub-bass. Before connecting it and switching it on, or trying any new settings, make sure that your amp or monitoring volume is turned down.**

## HOUSING (BENEFIT)

Opening up the Meatball™ and accessing the battery compartment is so simple it can stump the most highly-developed musician's brain. There are no screws - you just lift the front panel up by the foot switch while holding the outer casing and voila - as they say! Keep the case closed when in use for maximum signal screening and minimum hum pick-up. This also prevents ambient light from disrupting the optical workings.

**WARNING!! The circuit board and components can be sharp - PLEASE DO NOT TOUCH!**

## Battery holder

The clip on the back of the battery holder (opposite the contacts) is designed to latch on to the back of the

battery. The ideal way to remove the battery is with a pen by lifting the back of the battery and sliding the pen underneath, between the battery and the holder, thus releasing the battery from the clip. Alternatively you can lever it out using a suitable blunt instrument (e.g. medium to large screwdriver) **but make sure you lever against the battery holder and not the pedal casing.**

**WARNING!! Never attempt to remove the battery by pulling on it with excessive force! Avoid placing your hand near the circuit board.**

## CHROME KNOBS

For that extra spangle carefully remove the plastic covering the chrome - you'll be amazed at the difference!

## CONNECTIONS (TOP PANEL RIGHT TO LEFT)

### In/On

Connecting a jack to this will power up the unit (whether switched on or off). This will use battery power (if power jack is not connected). You can connect either the output of your instrument, or the output of another effect or an fx send from a mixer.

### Power jack

This is a commonly available type of jack for connecting a power supply (a.k.a. psu, AC adapter, wall wart)

**WARNING!! If you wish to use a power supply you must remove the battery first. Never have a battery and a power supply connected at the same time (see below).**

## BATTERY OR POWER SUPPLY? (or "How To Get Your Money's Worth!")

Even though the Meatball™ will run on a suitable battery (e.g. 9 volt PP3, 6F22 or MN1604 type) and a battery holder is provided, we strongly recommend that this is only as a last resort as the performance of the pedal will be seriously compromised! The inherent voltage decrease (esp. over time) and the relatively high internal resistance of batteries (compared to the low impedance of a good quality regulated power supply) will not be flattering to the potential sound. A power supply will give better headroom and less distortion, especially on high resonance (colour) settings. 12 volts will give extra headroom (which may be desirable for studio use) but please note that it will result in a slightly different frequency response. **NEVER RUN THIS PEDAL ON MORE THAN 12 VOLTS!!**

The maximum current consumption is approx. 20mA which means that even an alkaline battery will not last very long. In the long term it makes absolutely no financial (or ecological) sense to keep replacing them when you can buy a power supply for literally the price of a few disposable batteries. Please note also that a single power supply can be made to run a number of pedals (easily done with a more-than-fashionable Lovetone pedal board! ).

## POWER SUPPLY SPECIFICATIONS:

The power supply should have a Japanese-style, tip (centre) negative, "barrel" type connector. This type of connector is used widely in many devices and should be readily available from music or electronics outlets. (We do not currently sell power supplies.)

**IMPORTANT!!** Even though it is used widely, the connector is a non-standard part and comes in many size variations not all of which will work reliably. The connector has a dual function; to supply power to the pedal and also switch out the battery supply if a battery is fitted. The ideal dimensions for the connector are 2.1mm internal diameter and 5.4mm external diameter. Lovetone cannot guarantee

that the correct connector will be used at all times by all customers and we therefore stress that when using a power supply you remove the battery first. Do not connect a power supply without checking to see if a battery is fitted.

For safety reasons we recommend using a power supply with double insulation as opposed to earthing/grounding - in addition this will help prevent hum loops. It should be well smoothed, otherwise you can also get hum problems (from "ripple" on the dc output). The power supply should also be of the regulated type, which means that its output voltage should not vary significantly with load.

Voltage: the output should be 9v or 12v d.c. (or either if it has a selector switch).

**WARNING!! Never use more than 12v as this can result in permanent damage.**

Current: the current rating should be a minimum of 200mA (0.2A) up to 1.5A. Higher current (more expensive) supplies will generally have a stiffer, smoother output resulting in a cleaner sound. Anything higher than 1.5A, however, would be a waste of money for running a set of pedals.

PLEASE NOTE: THE CURRENT RATING OF THE POWER SUPPLY IS ITS MAXIMUM CAPACITY - THE PEDAL WILL ONLY DRAW THE CURRENT IT REQUIRES.

#### FX Loop

This dramatically enhances the Meatball™'s capabilities and can be used for instance to insert octaver and/or distortion for some real squelchy 70s cheese, or for special external triggering effects (see below). (The Big Cheese works spectacularly well used in this way). Technically speaking it provides a "buffered" version of the input signal coming into the In/On jack, thus preventing problems due to extra cabling losses and will therefore drive any effect. Connect **S** (send) to the input of an auxiliary fx unit or chain, and its output to **R** (return). The trigger section still works as usual (from the input signal), but the filter section is now preceded by the fx loop. If you merely placed fx before the Meatball™ it would be almost impossible to trigger effectively, especially with fx like distortion which have very little dynamic range. One advantage of the fx loop set-up is that it avoids this problem. It also means that by-passing the Meatball™ automatically by-passes all the fx in the loop.

The fx loop opens up a whole new range of truly stunning sounds with the possibility of external triggering. Here you connect your main sound source (the one you wish to filter) to **R** (the fx return) and you connect the external trigger to **In/On**. (There is no need to connect anything to **S**, although this still offers a buffered version of the input signal as before, which can be connected to a second Meatball™ for instance). The triggering source will not appear at the output, unless you want to mix it in by using the **Blend** control. PLEASE NOTE that the input impedance of the fx loop is relatively low (10K) and may require a separately buffered signal if a guitar, bass or other high impedance source is to be applied to it. This would of course not be necessary if the instrument signal was off tape.

You can literally trigger anything with anything: drum loops, vocals, strings etc.. You can even tap the end of a jack lead connected to **In/On** which could give singers something useful to do with their hands! The advantage with processing sounds off tape or off a sequencer is that it leaves you free to also *tweak some pots*. As usual the **Decay** and **Intensity** work particularly splendidly.

#### Pedal 1 (see **WARNING!!**)

Connect the output of a passive (i.e. non-powered, battery or otherwise) volume pedal (e.g. Boss FV50 or FV60) to this socket to control the decay time. PLEASE NOTE: It acts in series i.e. it adds extra decay time to whatever is dialled in on the **Decay** pot. With the pot set at minimum, the range of the pedal will approximate the normal travel of the pot. With the decay pot at maximum, the pedal will provide extra long decay times.

#### Pedal 2 (see **WARNING!!**)

Connect the output of a passive volume pedal to control the intensity. PLEASE NOTE: Unlike Pedal 1 this works in parallel with the pot which means that the available range is limited. The most noticeable effects here will be with the **Intensity** pot set to lower values.

**WARNING!! The two pedal input jacks above are to be used only in the manner described. Any volume pedal must only be connected to a SINGLE pedal jack.**

**DO NOT CONNECT ANYTHING ELSE TO THE PEDAL JACKS (EG. INSTRUMENTS, AMPS ETC.) AS THIS COULD RESULT IN PERMANENT DAMAGE.**

#### Out

Main pedal output.

The control panel is basically divided into two halves, TRIGGER on the left and FILTER on the right.

#### TRIGGER SECTION

##### Sensitivity

Determines the level at which triggering operates. For low instrument outputs the sensitivity should be increased (clockwise) and vice-versa. For extra dirt you can always overload the input!

##### Attack

Determines the filter attack response where a little tweak can result in a major funk dividend. It can also be used to soften the front end for a warmer French horn type of attack. The control works interactively with the **Decay** pot and dialling in too much attack with too short a decay can result in no triggering (because the filter has decayed before its even started).

##### Decay

Determines the filter decay time and is again a highly functional control not found on standard units. In **Up** mode shortest settings give an aggressive growly effect. Slightly longer ones give the archetypal auto-wah effect. Long settings create phasey textural sounds as the filter sweeps through the harmonic series. In **Down** mode the filter sweeps in the opposite direction. Here, the longer decay settings, the more pronounced the effect. Short notes create a response curve reminiscent of the famous (to people of a certain age) "Chameleon" bass line. The remaining switch gives triggering off **Full** bandwidth or **1/2** bandwidth (which favours trigger response to higher frequencies). This only affects the level of triggering and not the filter setting. Choose whichever option gives the best response for a particular style. This is useful with slapped bass for instance, where you can alter the relative triggering of low and high notes. The trigger **Off** mode is another new feature and opens up many new possibilities allowing the Meatball™ to be used, for example, as a static tone filter.

It is worth noting that the green LED, which indicates triggering status, operates whether the unit is switched in or out, so can always provide a useful visual guide to what the trigger is doing.

#### FILTER SECTION

##### Colour

Determines the filter resonance. For more subtlety back off the control anti clockwise. The resonance in effect works like a tone generator that stops just short of oscillation, and can therefore add to existing frequencies. For certain combinations of settings and input signal these peaks can be extreme and great care is needed when playing at high volumes (see WARNING), particularly with regard to bass frequencies. Used correctly, however, the Meatball™ can provide everything from effortless throbbing sub bass (don't use in the ocean unless you want a *big* surprise) to hypersonic twittering (which is guaranteed to pull the birds). It is in fact the Dr. Dolittle of the fx world.

##### Intensity

Determines the depth of triggering. Useful for tuning in to the desired filter frequency or generally for creating subtler effects.

##### Blend

Mixes straight signal with filtered, giving 100% effect when fully clockwise and vice-versa. It inherently creates funky phase-shift effects with a sweet spot around the \*. Tweaking **Intens.** in this position sounds like Rolf Harris playing a Jew's harp!

The filter has 4 frequency ranges from Lo to Hi (in approximate octave steps). It can also operate in 3 modes as indicated by mysterious squiggles (from left to right):

**High-pass**, **Band-pass** and **Low-pass**.

#### FOOTSWITCH

This switches the unit on or off (as indicated by the red LED). Unlike the majority of pedals, the Meatball™ will not affect (or load) the signal in by-pass (i.e. when switched off). Your instrument will therefore retain its natural sound.

**LOVETONE SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT OR CONSEQUENTIAL LOSS, HOWSOEVER CAUSED, RESULTING FROM THE USE OF THIS PRODUCT.**

**Please ensure that associated equipment e.g. amplifiers (particularly of the valve variety) and any other equipment connected to this product is safely earthed. Always use high quality cables, connectors and power supplies. Lovetone cannot be held responsible for misuse of this product due to associated equipment being faulty, unsafe or poorly maintained.**

This product is guaranteed by Lovetone for a period of ONE YEAR from the initial date of shipment by Lovetone to a distributor, dealer or end user. Lovetone will at its discretion repair or exchange for a new one, free of charge, any faulty or defective product returned to it within the above period except where the product:

a/ is deemed by Lovetone to have suffered unreasonable misuse or abuse

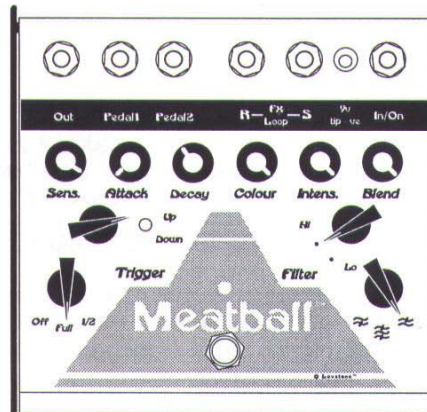
b/ has been tampered with or modified either in any way not compatible with normal use as suggested in the manual, or without the express permission of Lovetone.

**PLEASE NOTE: If any product is found to be defective or develops a fault please contact us first on +44 1491 571411 or email: info@lovetone.com before sending it back as most problems can be sorted out by phone or email. IMPORTANT!! If you do have to return the pedal and are outside the United Kingdom you must write: "RETURNED FOR REPAIR UNDER WARRANTY - CUSTOMS VALUE ZERO" clearly on the customs declaration. LOVETONE RESERVES THE RIGHT TO PASS ON TO THE CUSTOMER ANY CUSTOMS CHARGES INCURRED IF THE CUSTOMER DOES NOT DO THIS.**

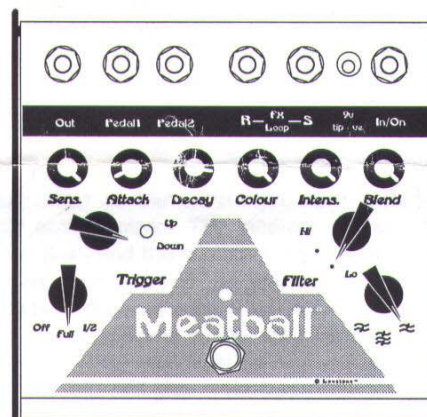
Lovetone products are subject to continuous refinement and improvement. Lovetone reserves the right to change the specifications of its products without notice. Lovetone is not under any obligation to retrofit any such changes or improvements to earlier models.

## TOURIST GUIDE TO THE MEATBALL™

### Standard "auto-wah"



### Pure Meatball



© Lovetone 2001

P.O. Box 102  
Henley-on-Thames  
Oxfordshire  
RG9 1XX  
England

Tel/Fax: +44 (0)1491 571411

email: info@lovetone.com  
website: www.lovetone.com

Lovetone is a Registered Trade Mark