# BASSBASE 250 BASS AMPLIFIER / COMBO AMPLIFIER

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Highes & Vetter .

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# Congratulations on your choice, the Hughes & Kettner BassBase 250!

The **BassBase 250 was** designed by a group of musicians and technicians to meet the needs of the professional bass player.

Superb tonal characteristics and sophisticated features define the **Bassbase 250 as** a professional bass amplification system. Both the compact, easily transportable combo and the elegant head versions of the **Bassbase 250 are** at home on stage and, thanks to sophisticated signal routing possibilities, in the studio.

The Basebass 250 is available as a combo or an amp head. The amplifiers are identical in both versions, with the exception that the combo comes with a speaker.

#### Sound quality through tube technology.

The **Bassbase 250's** preamp is constructed utilizing the classic ECC 83 tube. This tube is responsible for a lively, dynamic bass tone through it's innate compression characteristics and carefully dosed upper frequency range. The basic tone of tube technology is most convincing; from a dark warm jazz tone through to an articulate, punchy rock sound, down to the high attack of funk, the **Bassbase 250** can do it all.

#### Carefully balanced tone controls with a parametric midrange.

The four tone controls enable you to quickly and efficiently dial in your own basic tonal characteristics and allow for dramatic modifications to suit your needs. The midrange of the musical spectrum is paramount to a good baas sound therefore, the **Bassbase 250's** midrange can be adjusted parametrically.

#### 250 Watts of dynamic power with "DynaClip".

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Bass amplification demands a great deal of power. The explosive dynamics created when you play with a heavy attack drive conventional bass amps to the limits of clean sound reproduction. Annoying distortion, apart from endangering the speakers, restricts the output potential. The **Bassbase 250's** newly developed "DYNACLIP" circuitry suppresses the distortion created through dynamic peaks without limiting the dynamic spectrum.

Specially developed **10**" speakers in the combo version. Two speakers developed specifically for the **Bassbase 250** ensure a powerful, percussive reproduction of the amp's output, replete with precise transient response.

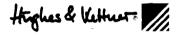
Additional tweeter for upper frequency response. An additional tweeter provides transparent highs and accurate harmonic reproduction.

Ergonomic, back lit front panel controls.

The front panel controls are- arranged for maximum accessibility and simplicity. Potentiometers, function permitting, are center notched for a "memory effect". Back lighting provides for visibility on even the darkest stages.

The **Bassbase 250** was engineered to provide you with the opportunity to comfortably create your personal sound. This manual will give you some insights into the **Bassbase** and familiarize you with it's features, enabling you to do just that.

Have fun with your Bassbase 2501



# FRONT PANEL CONTROL FEATURES

#### (1) INPUTS:

The Bassbase has **two input jacks** with different input sensitivities to accommodate basses with passive as well as active electronics. LO INPUT is designed for active basses with active pickups. HI INPUT has a higher sensitivity rating for the more traditional passive pickups.

#### (2) TUNER:

Directly above the two input jacks you will find the TUNER jack. This jack is suitable for sending a signal to an external tuning device. Connect the TUNER jack to the external tuning device's INPUT jack.

#### (3) MUTE:

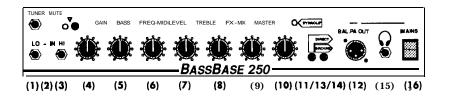
The MUTE switch silences the **Bassbase**. When the MUTE is activated (MUTE LED illuminates), no signal is sent to the power amp/ Line out/ PA out; only the TUNER jack receives the signal.

The MUTE function is especially convenient for silent tuning between songs or sets when it is less than desirable to have audience participation. MUTE is also recommended when switching the power off, changing instruments, etc.

#### (4) GAIN:

The **Bassbase's** preamp is constructed with tube circuitry, lending the amp a dynamic, warm sound typical of classic tube technology. The GAIN control sets the preamp's input sensitivity and fine-tunes it to the instrument's output. Higher GAIN settings add a nuance of overdrive and harmonic distortion. The intensity of the compression effect inherent in tube amplification is also adjusted with the GAIN control.

**PLEASE NOTE:** Tubes need to reach a minimum operating temperature; a few seconds delay between turning the power on and reaching operational readiness are the norm with the **Hughes & Kettner BASSBASE 250**.



# THE BASSBASE 250'S TONE CONTROLS

The BASSBASE's tone controls are designed to produce dramatic changes in the tonal spectrum by using only the essential control features. A minimum of effort by you, the player, can achieve maximum effect.

#### (5) BASS:

The BASS pot adjusts the lower frequency range and specifically influences the frequency response of the low B, E and A strings. The center position is neutral; turn the pot to the right to increase the low end, to the left to decrease it. The adjustment values are approximately +/-15db. The center frequency is 90hz.

# **MID - THE PARAMETRIC MID CONTROL**

The Bassbase 250's mid-range control is semi-parametric, allowing you to freely choose the frequency range which you want to influence. The semi-parametric tone control has two pots, one to determine the frequency range that is to be adjusted, and the other to increase or decrease said frequencies. This allows the mid-range to be custom tailored to your personal tastes.

# (6) FREQ:

This pot dials in the frequency you want to adjust; app. 2000 bz rotated completely right and 140 hz at the far left position.

# (7) LEVEL:

Determines the amount of boost or taper to the frequency you have dialed in with the FREQ pot. The control range is +/-15 db.

The parametric tone control enables you to adjust the entire mid-range spectrum. The mid-range is the most essential indegredient in a good bass sound, the entire tonal character is determined in this frequency range. We advise you to familiarize yourself with the variety of tones the FREQ and LEVEL controls have to offer and experiment with these pots to hear all the possibilities.

#### (8) TREBLE:

The TREBLE pot adjusts the high frequency through a wide band and determines the amount of bite and harmonics. The center frequency is app. **8khz**.

#### (9) FX-MIX:

The **Bassbase 250** is equipped with an effects loop switched in parallel for external effects devices. Conventional effects loops, switched in series, send the entire signal through the effects device, whereas the Bassbase's FX-MIX pot allows you to determine the precise amount of the original signal you want to send through an effects device.

FX-MIX: The far left position allows none of the signal to be sent down the effects loop path. Rotate the pot to the far right, and the entire signal is sent for processing. (The effects path functions now in the same fashion as in a conventional effects loop).

NOTE: If you choose not to connect an external effects device, ensure the FX-MIX pot is rotated completely left! The effects loop can be switched on and off via a footswitch.

#### (10) MASTER VOLUME:

controls the overall volume of the BASSBASE 250.

#### (11) DYNACUP:

A control LED illuminates when **DYNACLIP** is operational. **DYNACLIP** is a power amp circuit that was developed exclusively for the BASSBASE. It efficiently suppresses power amp clipping without sacrificing peak dynamics, as opposed to peak limiters. Unpleasant and potentially speaker damaging distortion is avoided and the effective power output is increased.

#### (12) BAL.PA OUT:

This XLR output jack sends a transformer balanced signal to feed a PA board.

#### (13) DIRECT:

Depress the DIRECT switch to bypass Gain, tone controls and the effects loop to send an instrument signal via BAL.PA OUT.

#### (14) GROUND:

Depress the **GROUND** (**LIFT**) switch to sever the ground between BAL.PA OUT and the PA board. Choose the position that has the least amount **of** audible noise.

# (15) PHONES:

Headphone jack. Connect headphones here for silent practice sessions. if the PHONES jack is used, the speaker in the combo version is automatically disengaged.

# (16) MAINS:

**Main power** supply switch. The front panel inscriptions will illuminate at the ON position.

# REAR PANEL FEATURES AND FUNCTIONS

Located on the BASSBASE 250's rear panel, you will find the AC power supply socket for the factory supplied Euro-mains lead. Integrated into the AC power supply socket is the FUSE bracket.

In order to change a fuse, depress the fittings on both sides of the bracket and pull the fuse out. The appropriate fuse amperage for each model can be determined by reading the value annotated below the fuse bracket.

#### **VOLTAGE SELECTOR:**

All European models can be adjusted to operate at 220V or 240V. Rotate the insert in the fuse bracket to the desired position. The correct voltage is determined by the number visible in the upper region of the fuse bracket. Ensure this number corresponds to the voltage specifications of your country. Also ensure that the fuse bracket is completely secure after changing a fuse or adjusting the voltage.

#### SPEAKER

This speaker jack is suitable for connecting an **external speaker**. The combo model's speakers are factory connected to this jack. The Bassbase's speaker combination was designed to take advantage of the amp's maximum output; thus the overall impedance of 4 ohms. External speakers for the combo version should be used as an alternative, not an addition .

The BASSBASE's power output is 180W at 8 ohms, 250W at 4 ohms. The DYNACLIP circuitry increases the effective power output by about 25%. Do **not connect any speaker combination with an overall impedance of less than 4 ohms.** 

#### COOLING DEVICE:

Please note that the cooling device heats up considerably, especially after extended sessions at peak power. Ensure that there is plenty of space behind the amp to allow for adequate air circulation.

## LINE OUT:

The LINE OUT jack is used to drive additional power amps.

#### FX-LOOP:

**The** FX-LOOP jacks are suitable for connecting an external effects device. The processed signal is mixed with the original via the FX-MIX pot on the front panel. Connect SEND to the effects device's INPUT and RETURN to the effects device's OUTPUT

The voltage level of the FX-LOOP can be adjusted with the **-10db switch** from 1v down to 300mV in or&r to accommodate different types of effects devices.

**NOTE:** If you don't connect an effects device, the RETURN jack can be used to connect an additional instrument (guitar, bass, keyboards) or another signal source (drum machine, tape recorder, etc.). The volume of this second signal source is regulated with the **FX-MIX** pot.

#### **FX FOOTSW ITC H**

**The** EFFECTS LOOP can be switched on and off with a footswitch connected to the FX FOOTSWITCH jack.

NOTE: If no effects device is used, the FX FOOTSWITCH can be used to switch from one master volume to another.

- Use the connected footswitch to turn the FX LOOP off.
- The volume is now regulated with the MASTER VOLUME pot. ☞

- Now turn the FX LOOP back on via the footswitch.
- The second master volume is regulated with the FX MIX pot on the front panel.
- You can now switch back and forth between two seperate master volumes.

## CARE OF YOUR AMP AND WARRANTY CONDITIONS

#### A WORD ABOUT VALVES

• Valves need to reach a certain operating temperature. They need a few seconds after the power has been switched on to warm up before they will work.

• Valves are sensitive to shock. Once you have switched the amplifier off, give it a few minutes to cool down before transporting it.

• The sound characteristics of valves will also tend to change with time. Occasionally, they will need replacing. The ECC 83 valve used in the BASSBASE is one of the most commonly used, and the most affordable. Generally speaking, a change of valves is only necessary every few years.

Before opening the amplifier casing, ALWAYS remove the mains plug!

#### WHERE TO USE THE AMPLIFIER

do not use the unit under following conditions:

- extremes of temperature or high humidity
- poor ventilation or insufficient cooling
- extreme vibrations or impacts

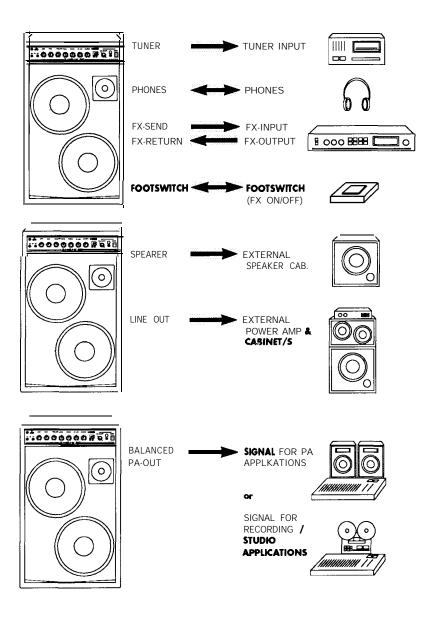
#### SERVICING AND REPAIRS

if your amplifier suffers a failure or fault, refer the matter to your authorised **Hughes** & Kettner dealer. Do not try to rectify the problem yourself; servicing and repairs are jobs for experts. Please note: any interference with the amplifier by unauthorised persons or workshops will render your guarantee invalid.

#### WARRANTY CONDITIONS

every Hughes & Kettner product is accompanied by a warranty card showing its serial number and a card showing proof of inspection.

# **BASSBASE 250 SIGNAL ROUTING**



# **BASSBASE 250 SOUND EXAMPLES**



The above examples are just that, examples. Your sound is ultimatly dependant on the type of instrument and the playing style you use. Nevertheless, these settings will give you a general impression of the Hughes & Kettner **Bassbase 250's** sound spectrum.

MODE	RN "B	ASIC"	BASS				
GAIN	BASS	FREQ	. MID > LE	EVEL	TREBLE	FX-MIX	MASTER
4-5	6	7		3	8	0	5
STRAI	GHT R	OCK S	SOUND				
GAIN	BASS	FREQ.	< MID > LE	VEL	TREBLE	FX-MIX	MASTER
8	5	9		6	7.5	0	5
THE FU	JSION BASS		< MID > LE	VEL	TREBLE	FX-MIX	MASTER
7	6	8		4	8	0	5
THE "S	<b>LAPA</b>	ПАСК'	t				
GAIN	BASS	FREQ.<	MID > L	EVEL	TREBLE	FX-MIX	MASTER
14	8	6		3	9	0	7