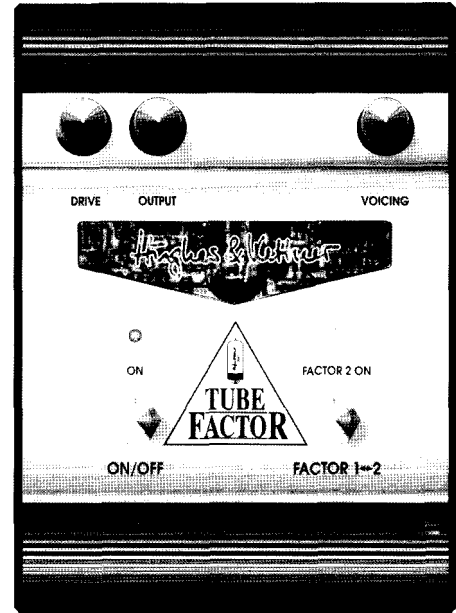


TUBE FACTOR

User's Manual
Bedienungsanleitung



6. Recommended Settings/ Empfohlene Einstellungen

NEUTRAL

Does not affect the sound but adds depth and control to every Clean-, Crunch- and Lead-sound.

NEUTRAL BOOST

Standard boost for every Clean-, Crunch- and Lead-sound.

UNIVERSAL 1

For big, fat Clean-, Crunch- and Lead-sounds.

UNIVERSAL 2

Mid boost suitable for the most Clean-, Crunch- and Lead-sounds, Perfect for FAT CLEAN.

HOT VOX

Gives this sensibly controllable soft clipping to the edge of your Clean-sound.

VINTAGE SCREAMER

You know what we mean ... Works with Clean-, Crunch- and Lead-sounds.

CREAMY LEAD

Fat, sweet Lead tone for Clean- and Crunch- channels.

HOT LEAD

Your Clean channel changes to a high gain lead channel.

ULTRA LEAD

Be cautious ... very aggressive and hot Lead tone just for use

TUBE FACTOR

User's Manual

Safety Guidelines

1. Introduction
2. Jacks and Cable Connections
3. Switches and Control Features
4. Technical Data
5. Recommended Settings

Important Safety Guidelines

Please keep in mind that the tube installed in the TUBE FACTOR is a high-voltage powered component. For service or repairs, never open the chassis of the TUBE FACTOR on your own; always have the device service by a qualified, certified technician.

1. Welcome

Congratulations and thank you for purchasing the Hughes & Kettner TUBE FACTOR. With this new tube device, you will find your guitar sound is much fatter, the dynamics of your playing style are substantially improved and the enhanced performance of your amp will astound you.

2. Jacks and Cable Connections

- 2.1. IN: Connect your TUBE FACTOR'S input jack to the output of your guitar.
- 2.2. OUT: Connect your TUBE FACTOR'S output jack to the input of your amp.
- 2.3. REMOTE Jack: If you choose to switch the TUBE FACTOR via a MIDI switcher, use this jack to activate the two switching functions remotely. (Tip = Factor 1/2; Ring = On/Off).
- 2.4. A/C power pack connector

3. Switches and Control Features

- 3.1. ON/OFF Switch: Use this control feature to switch the TUBE FACTOR on or set it to bypass.
- 3.2. ON/OFF LED: This LED illuminates to indicate the TUBE FACTOR is processing your signal.
- 3.3. FACTOR 1/2 Switch: Use this switch to flip between the two TUBE FACTOR operating modes.

FACTOR 1 activates the tube circuit that fine-tunes the dynamics and response generated by the interplay between your guitar and amp. It primarily boosts those elements of the sound spectrum that are responsible for making your tone fat. Factor 1 delivers bluesy, singing lead tone and loud, tight clean sound.

FACTOR 2 activates the Drive mode. The frequency spectrum is boosted in the low and high ends and the amp delivers more attack. In this mode TUBE FACTOR delivers big high-gain lead tone and heavy-duty rhythm crunch with loads of punch and attack, much like the trademark guitar sound of AC/DC.

34 FACTOR LED: When you set the TUBE FACTOR to Factor 2 mode, this LED illuminates (red).

3.5. VOICING Control: The voicing knob is an active sound-shaping element that does not influence a specific frequency bandwidth. What it actually does is boost different sound characteristics throughout the control range. Use this pot to fine-tune the tonal spectrum of your guitar to your amp's current setting. Experiment with different settings to spice up the sound to your taste. Refer to the section "Recommended Settings" in this manual for more helpful tips.

3.6. OUTPUT Control: Use this pot to dial in the desired TUBE FACTOR output level. If you set the Drive pot to a relatively low value, you can use the TUBE FACTOR as a neutral preamp to increase the signal being sent to your amp's input. The higher the input level, the more you can exploit the headroom of your amp. Once the maximum threshold of headroom is exhausted, the amp can no longer amplify the signal to higher level. At this point the boosted input signal adds to the compression and distortion of the output signal.

3.7. DRIVE Control: Use this pot to dial in the desired level of distortion for the TUBE FACTOR tube. The more you turn the pot up, the higher the gain. The Drive pot is designed to interact with the Voicing pot, which is why you will only hear marginal deviations in tone when you adjust the Voicing pot at low or extremely low Drive pot settings. Please keep in mind that too much of a good thing is not much good at all. You should be especially careful with the Drive pot when you are feeding the signal to the lead channel of your amp. If you go overboard on the gain, your sound will end up muddy and the enormous amount of compression will generate feedback.

5. Technical Data

Input Impedance:	1 M ohm	Max. current consumption:	480 mA at 13.4 V
Min. input level:	-40 dB	Max. power draw:	6.5 VA
Nominal input level:	-26dB	Tube type:	ECC83 or 12AX7A
Max. input level:	+ 17dB	Width:	160 mm
Output Impedance:	2 K ohms	Height:	80 mm
Max. output level preamp on:	+ 6 dB	Depth:	215 mm
Max. Output level preamp off:	+ 12 dB	Weight with power pack:	1.55 kg (3 lbs)