Soundelux U195 User's Manual

USING THE MIC

The U195 requires 48vdc phantom power, fed through the M-XLR-3 at the base of the mic. SOUNDELUX RECOMMENDS USE OF A CE-APPROVED POWER SUPPLY. Use of this mic with less than 48vdc will result in less than optimum performance (45vdc is the lowest acceptable), and operation with less than 24vdc resulting in very seriously degraded performance.

Requires 48 Vdc == @ 0.5mA

CAUTION

Shock Hazard: Do not open mic when connected to power source.

Es benotigt 48 Vdc == @ 0.5mA

VORTICHT:

Schok gefahr: Bitte nicht daf mikrofon offnen wenn es eingeschaltet ist in einen stoppkontakt.

Require 48 Vdc == @ 0.5mA

ATTENCIONE:

Choc hazard: N'ouvrez pas le microphone quand il y a un connectionne avec un source d'electricity.

A bisognio de 48 Vdc == @ 0.5mA

ATTEZIONE:

Rischio di scossa: Non aprire il microfono quando e attacato al'eletricita.

Positive excitation of the diaphragm at the front of the mic results in a positive voltage at XLR pin 2 (standard). Audio output is transformer balanced.

USE OF SWITCHES:

All switches may be engaged while unit is powered without damaging unit. A ball point pen or small screwdriver may be used to activate switches.

"FAT" MODE

When "fat" mode is selected via slide switch at rear of mic, a 4dB boost of frequencies 200hz and below occurs (technically speaking, is a 4db relaxation {below 200 Hz} of the overall NFB, so that there is less feedback at low frequencies and more at high frequencies). "Fat" mode does not decrease any high frequency response characteristics (though it might influence your perception of high frequency response). This yields a greater sense of impact and power, as well as conveying a warm, intimate sound. Since the capsule, transformer and amp circuit are very sensitive well below 10Hz (when in "fat"), this mic can be sensitive to rumble and other sub-sonic activity one might not normally be aware of. Console based high pass filters have successfully been used to eliminate rumble while maintaining the warm character of the mic when used in facilities with high levels of sub-sonic activity, although we recommend this as a last resort measure, especially for music recording.

"FAT/LOCUT" MODE

This mode allows the user to take advantage of the fat mode's excellent midbass while removing any trace of 'tubbyness'.

"NORM" MODE

The mic is far less sensitive to sub-sonic activity in this mode. The locut switch results in a 10dB cut @ 30Hz (relative to 100Hz).

"PAD"

The pad is engaged by sliding the switch to the "on" position. It is set for –10dB. The basic frequency response of the mic is maintained when the pad is engaged however absolute signal to noise is lowered. The pad works in both "fat" and "norm".

RECOMENDED APPLICATIONS

Some of the recommended applications the mic was designed for:

1-3 feet away from a kick drum	*(norm mode)*	Foley	*(fat & norm)*	Male Vocals	*(fat or norm)*
close up on floor and rack toms	*(norm mode)*	ADR & VO	*(norm)*	Female Vocals	*(fat+ locut)*
drum kit overheads	*(norm mode)*	radio & tv production	*(norm)*	Bass cabinet	*(norm + pad)*
close-up on crunch guitar cabinet	*(fat mode)*	radio on air	*(norm)*	SFX / location	*(norm)*
acoustic guitar	*(norm mode)*				

+48 Volt Phantom Powering (DIN 45 596 / IEC268-15A)

In phantom powering the dc from the positive supply terminal is divided via two identical resistors, so that one half of the dc flows through each audio modulation conductor to the microphone, and returns to the negative voltage terminal via the cable shield. The effect which noise superimposed on the dc supply voltage has on the microphone output voltage is reduced by the common mode rejection factor, which exceeds 60 dB.

Phantom powering provides a connecting system that is fully compatible with moving coil and ribbon mics, since no potential difference exists between the two audio conductors.

Studio outlets so powered will therefore accept all microphones with balanced floating outputs as well as the modulation conductors of tube equipped mics without the need to switch the dc supply off.

If, however the supply voltage is applied to unbalanced or center tap grounded amplifier inputs, it will be shorted and the mic so connected will not work.

In center tap grounded equipment with input transformers the respective ground connection may, in most cases, be lifted without any negative effect on equipment performance. If this is not possible, isolating capacitors must be used.

Phantom powered condenser mics may be connected to unbalanced amplifier inputs by inserting a transformer.

Phantom power should be supplied from a central, current limited supply (as is found in most studio / portable mixing boards or outboard mic preamps as well as outbord phantom power supply boxes) through a pair of 6.8kohms resistors, precisely matched to within 0.4%.