

User's manual  
Soundelux model U195

- 1) description
- 2) additional circuit notes
- 3) getting started
- 4) power supply and cable
- 4) safety warnings
- 5) specifications

1) Soundelux U195 is a FET amplifier cardioid microphone powered by P48 phantom voltage. The microphone's audio output is standard male XLR3, with positive excitation of the diaphragm at the front of the mic resulting in a positive voltage at the output XLR's pin 2. Audio output is fully transformer balanced.

2) The U195 circuitry is based on an optimized version of the venerable U87, with a much larger transformer and more sophisticated bias circuitry to eliminate the classic "honk" midrange emphasis of the U87. In addition it offers the user unrivaled control of the amplifier, providing voltage divider pad function (rather than a capacitive pad), active low cut function, and a unique "fat/norm" switch which allows a gentle low mid/bass EQ in the circuit. This "fat" switch provides a greater sense of impact and power, as well as conveying a warm, intimate sound.

3) It is recommended that the user place the mic in its shockmount on a stand and connect all the cables before using the unit. This mic (especially in "fat" mode) is very sensitive to low frequencies below 20Hz, and mic may be sensitive to rumble, HVAC and other sub-sonic activity that were previously unapparent. Any combination of switch settings may be used for a nearly infinite variety of tonal variations.

4) Soundelux U195 is powered by P48 phantom power. Operation with less than 40v phantom may result in compromised performance. For more detail on phantom powering, please see DIN 45 596/IEC268-15A. Remember to use as new, good quality cables as possible, as older cables with internally frayed shield wires often result in poor performance of phantom powered mics.

5) CAUTION: Shock Hazard: Do not open microphone when connected to power source. No user serviceable parts inside. Refer failed units to qualified service personnel.

VORTICHT: Shock gefar: Bitte nicht das mikrofon offen wenn es eingeschaltet ist einen stoppkontakt. Keine zu wartenden Teile im Inneren. Beziehen gescheitert Einheiten qualifiziertem Service-Personal.

ATTENCIONE: Choc hazard: N'ouvrez pas le microphone quand il y a une connexion avec une source d'électricité. Aucune pièce réparable par l'utilisateur. Référer unités échouées à un personnel qualifié.

ATTENZIONE: Rischio di scossa: Non aprire il microfono quando è attaccato all'elettricità. Non contiene parti riparabili. Riferimento unità riuscite a personale qualificato.

Specifications:

Patterns: Cardioid  
 Frequency Range: 20Hz to 16kHz, +/-2dB  
 Sensitivity: 8mv/Pa (-42dBm=94dB SPL)  
 Equivalent Noise: 12dB ("A" weighted) 23dB (unweighted)  
 Distortion vs.SPL @1kHz:  
     126dB = 0.5% THD  
     127dB = 1% THD  
     129dB = 2% THD  
     (increasing distortion is exponential, complex 3rd harmonic)

Impedance: 200 Ohms true transformer balanced  
 Recommended load: 2k Ohms  
 Dynamic range (maxSPL-"A"noise): 111dB  
 S/N (94dB-noise): 81dB "A", 72dB unweighted  
 Capsule size: 1" diameter, dual symmetrical backplate K67 type  
 Power consumption: [0.5mA@48Vdc](#)  
 Amplifier type: Minimalist Class A fet/transformer, no switching supplies or oscillators

Amplifier Controls:  
     "fat/norm" bass contour switch  
     "locut" rumble filter switch  
     "pad" [-10dB@30Hz](#) relative to 100Hz sensitivity switch

Dimensions: 2" dia x 7.7" oal (50x195mm)  
 Weight: 1lb 9.6oz (1.6lbs) =725g  
 Shipping weight: 2 lbs  
 Power Supply: user provided

