User's manual
Bock Audio model 251

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1) The Bock Audio model 251 is a high quality variable directivity studio condenser microphone utilizing vacuum tube electronics. Modeled after AKG's classic ela M251, originally built in the 1950's, this mic takes that platform and expands the electronics bandwidth. It utilizes it's own proprietary cable and power supply. 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 Bock Audio 251 uses classic single triode circuitry with no additional negative feedback and high quality through hole components. Through hole components are more mechanically robust than surface mount and allow for worldwide ease of repair. Single triode mic circuits demand excellent capsules before them and excellent transformers after them, with a reward of low noise, simplicity of troubleshooting, and classic sound unachievable otherwise. The Bock 251 departs from the classic 251 of the 1950's in it's expansion of the bandwidth of the electronics, which has had it's low frequency cutoff frequency decreased from 80Hz to 10Hz, without any loss of high frequencies, by use of a larger transformer. As well, the cathode bias cap has been increased to maximize warmth.

3) It is recommended that the user place the mic in it's shockmount on a stand and connect all the cables before applying power to the unit. Allow a few minutes for the mic to warm up.

4) The Bock Audio P-251 full linear power supply features simple shunt B+ regulation and active current source for the heater. The outputs and cable pinouts are:

1) audio (-)
2) audio (+)
3) pattern (if applicable)
4) heater (5.9v typical)
5) B+ (120v typical)
6) ground
case) shield

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

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

www.bockaudio.com 818-506-1870

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

ATTEZIONE: Riscchio di scossa: Non aprire il microfono quando e attacato al'eletricita. Non contiene parti riparabili. Riferimento unità riusciti a personale qualificato.
Specifications:

Patterns:	Cardioid, omni, Figure of 8 Switchable on mic
Frequency Range:	10Hz to 18kHz, +/-2dB
Sensitivity:	19mv/Pa
Equivalent Noise:	18dB (“A” weighted) 32dB (unweighted)
Distortion vs.SPL @1kHz:	
	112dB = 0.5% THD 118dB = 1% THD 129dB = 2% THD (increasing distortion is non-exponential, nearly linear, and primarily 2nd harmonic)
Impedance:	200 Ohms true transformer balanced
Recommended load:	2k Ohms
Dynamic range (maxSPL-"A"noise):	94dB
S/N (94dB-noise):	76dB “A”, 62dB unweighted
Capsule size:	1” diameter, dual asymmetrical backplate CK12 type
Tube type:	New Old Stock 6201 or ECC801s
Dimensions:	2” dia x 8.5” oal (52x216mm)
Weight:	1lb 9.3oz (1.58lbs) =716g
Shipping weight:	12 lbs
Power Supply:	P251 true linear, factory wired 115v or 230v operation