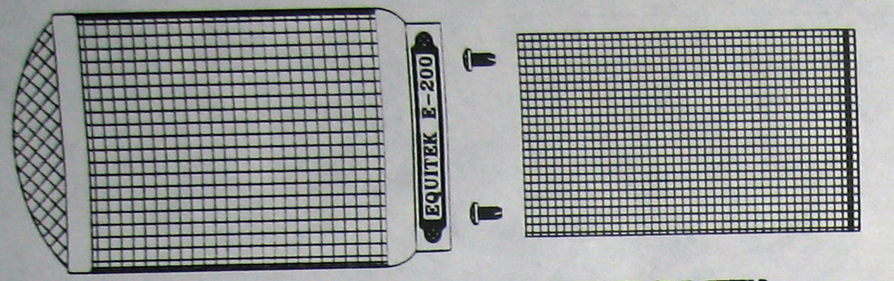
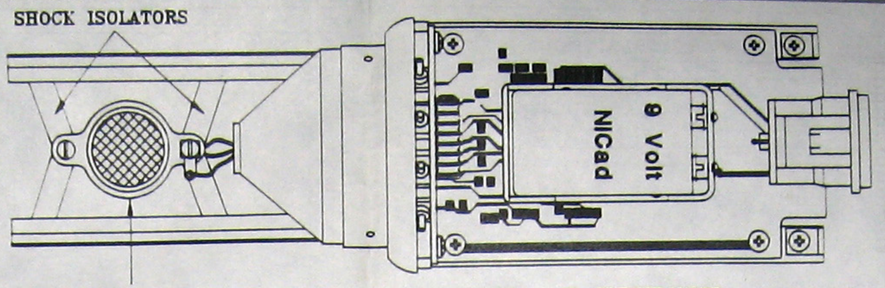


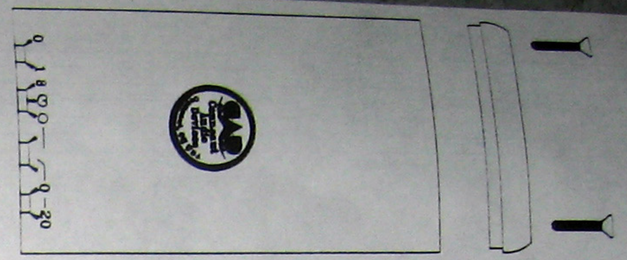
DRESS SCREEN

POP FILTER/EMI SHIELD



MATCHED CAPSULES

BATTERIES AND ELECTRONICS



MAIN HOUSING

The EQUITEK E-200 from Conneaut Audio Devices is a multi-pattern side address microphone designed for recording, broadcast, and sound reinforcement. The implementation of high speed, low noise, low distortion electronics makes the E-200 the ideal candidate for the most critical applications.

The Equitek E-200 incorporates a number of unique design features including:

- servoec head amplifiers.
- transformerless balanced output circuits.
- an internal power reservoir system that can supply ten times the power available from phantom powering alone.
- dual cantilevered capsule shock isolators.
- a stainless steel pop/EMI filter.
- new automatic power shut down circuit.
- reduced current consumption over previous Equitek models.

SWITCH FUNCTIONS

The Equitek E-200 has four switches that provide control over power, pattern selection, high pass filtering, and a non-capacitive 20 dB pad.

POWER

1 Microphone power on.

0 Microphone power off. (Use this switch position for fastest charging of NiCad batteries.)

PATTERN

8 Figure 8 pattern.

♡ Cardioid pattern.

○ Omnidirectional pattern.

HIGH PASS FILTER

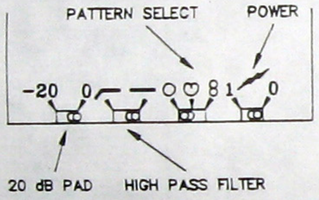
— Flat response.

⌐ Low end roll off below 80 Hz.

Pad

0 Full gain. (Highest sensitivity.)

−20 −20 dB gain. (Highest cliping level.)



POWERING THE EQUITEK E-200

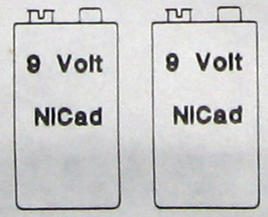
Powering of the EQUITEK E-200 is accomplished with a pair of rechargeable 9 volt NiCad batteries. In normal use, the microphone should be supplied with 48 volt phantom power also. The purpose of this powering arrangement is to overcome the inherent current limiting associated with most phantom power supplies. The batteries are trickle charged by the phantom supply. When needed, the batteries provide the extra current necessary during high SPL transients. The microphone will not function without the batteries present. The microphone can be used without phantom power for periods of up to 6 hours provided that the batteries are fully charged. Standard 9 volt alkaline batteries can also be used if extended operation is needed when no phantom power is available.

The minimum requirement for the phantom supply is a regulated 48 volts with the capability of supplying at least 8 mA. of current. Supplies that do not meet this minimum requirement will not allow continuous operation of the microphone.

The high quality NiCad batteries used in the EQUITEK E-200 have a higher output voltage than most normal 9 volt NiCad batteries. (The majority of "9" volt NiCad batteries are actually 7.2 volts.) These batteries require the same care as any other type of rechargeable battery. Before initial use, the batteries need to be fully charged. Failure to do this could reduce the life of the batteries. The batteries can be charged by two different means.

1.- Connect the microphone to a phantom supply and allow the batteries to charge for a period of 14 to 15 hours. Make sure that microphone is turned off.

2.- Remove the batteries from the microphone and charge them in a standard NiCad battery charger for a period of 14 to 15 hours.
A spare set of batteries and an external battery charger are recommended in critical applications.



CHANGING BATTERIES

To gain access to the internal NiCad batteries:
1-Loosen, but do not remove the small screw in the back of the microphone.
2-Remove the 2 screws on the bottom of the microphone.
3-At this point, the body and end cap can be removed.
4-To remove the battery from its' holder, gently lift up the bottom of the battery.
5-To insert a battery into the holder follow the reverse procedure making sure that the battery contacts are fully engaged.

To re-assemble the microphone:
1-Slide the body on the microphone. Align the slots in the body with the control switches and then tighten the screw on the back of the microphone.
2-If the end cap separated from the body, replace it. (It will only fit one way.)
3-Replace the 2 bottom screws. Make sure both screws are engaged before tightening the screws.

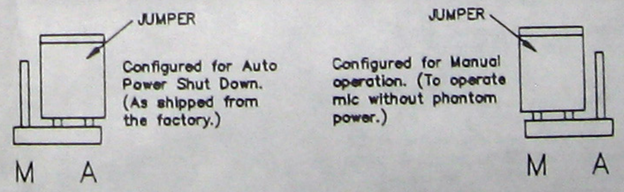
TECHNICAL SPECIFICATIONS

TYPE: SIDE ADDRESS, 3 PATTERN ELECTRET CONDENSER
FREQUENCY RANGE: 10 Hz – 18 KHz
POLAR PATTERNS: FIGURE 8, CARDIOID, OMNIDIRECTIONAL
OUTPUT IMPEDANCE: 200 ohms
SENSITIVITY: (at 1000 hz)
17.8 mV/Pa
OPEN CIRCUIT VOLTAGE: −55 dB RE: 1V/µbar
POWER LEVEL: −34 dB RE: 1mW/10 µbar
MAX. OUTPUT LEVEL: −20dB GAIN, 8.9 dBV
0 dB GAIN, .89 dBV
TOTAL HARMONIC DISTORTION: LESS THAN 0.15%

MAXIMUM SPL: 148 dB SPL (with pad switch on)
SELF NOISE: 16 dB EQUIVALENT SPL (A-weighted), 0dB GAIN
DYNAMIC RANGE: 132 dB
SIGNAL-TO-NOISE RATIO: 78 dB (at 94 dB SPL)
CARTRIDGE CAPACITANCE: 60 pF
POWER: MINIMUM REQUIREMENTS, 48 TO 52 VOLT PHANTOM POWER CAPABLE OF DELIVERING AT LEAST 8 MA.
CONNECTOR: THREE PIN MALE XLR TYPE OR EQUIVALENT
DIMENSIONS: 9 5/16" (236.5 mm) LONG X 2 1/2" (63.5 mm) DIA.
WEIGHT: 12 OZ (340 grams) (INCLUDING BATTERIES)

Automatic Power Shut Down Circuit

The Equitek E-200 incorporates a new Automatic Power Shut Down circuit that helps prevent accidental discharge of the internal NiCad batteries. The circuit monitors the phantom voltage at the XLR mic connector. As long as there is phantom power present at the mic connector, the microphone will function normally. If there is no phantom power present at the XLR mic connector, (from either dis-connecting the mic or turning off the source of phantom power) the microphone will turn itself off, regardless of the position of the power switch on the front of the mic. This prevents the batteries from being discharged when the mic is not in use. If it is desired to operate the mic from battery power alone, the auto power shut down feature can be defeated by moving a small configuration jumper inside the mic. First follow the instructions above for changing batteries to gain access to the inside of the microphone. The configuration jumper is located next to one of the NiCad batteries on the componant side of the printed circuit board. Gently pull upward on the jumper and replace it as shown below to obtain the desired function.



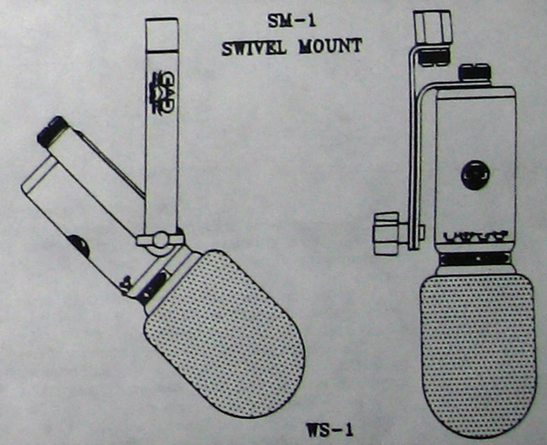
Included Accessories

SM-1 Equitek E-200 swivel mount

Available Accessories

WS-1 Equitek E-200 wind screen kit.
EPS-1 Equitek phantom supply. (Not Shown.)

SM-1
SWIVEL MOUNT



WS-1
WIND SCREEN KIT
COMES WITH 40 & 100 PPI FOAM WINDSCREENS