



B R O A D C A S T

AUDIO

E Q U I P M E N T

for

A M • F M • T E L E V I S I O N

M I C R O P H O N E S

C O N S O L E S

C U S T O M E Q U I P M E N T

A M P L I F I E R S

R A C K E Q U I P M E N T

T U R N T A B L E S

R E C O R D E R S

S P E A K E R S

PRESSURE MICROPHONE

TYPE BK-1A



FEATURES

- Smooth response over the essential audio frequency range
- Modern styling blends pleasingly with the television scene
- Removable from base for use as hand microphone or for mounting on floor stand
- Adjustable ball and socket swivel allows any desired direction
- Ideal for remote pickups—insensitive to wind and mechanical vibrations
- Non-reflective TV gray finish
- Frequency characteristic independent of source distance
- Light weight—small and portable

USES

The high-fidelity BK-1A "Commentator" pressure microphone is designed for broadcast use in AM, FM and TV stations. Its construction makes it particularly well suited for remote pickups where, if used in the open air, the modern design practically eliminates the effect of air currents. The BK-1A features a smooth response and frequency range which make it suitable for reproducing both music and speech.

Rugged, insensitive to wind and mechanical vibration, the BK-1A is the ideal microphone for outdoor use where constant handling by the announcer is necessary. Highly styled, it effectively serves TV announce desk or conference programs where each participant has a microphone in the scene.

DESCRIPTION

The BK-1A is a pressure actuated type microphone. The sound pressure actuates a lightweight molded diaphragm attached to an annular coil assembly which is placed within a magnetic field. An acoustic circuit, coupled to the diaphragm, is proportioned so that the diaphragm velocity remains essentially constant for a constant sound pressure from 60 to 10,000 cycles. The coil is connected to an impedance matching transformer providing output impedances of 30, 150, and 250 ohms.

Non-directional when mounted vertically, a semi-directional characteristic is obtained when horizontally mounted, in which case the BK-1A is essentially non-directional for frequencies below 2000 cycles—the higher frequencies attenuated more as the angle with the perpendicular to the diaphragm increases.

Versatility is assured by design which allows the BK-1A to be stand mounted on desk or floor or to be easily removed from the stand mountings for use as a hand microphone. A durable ball and socket joint located at the base of the stem makes selection of the best speaking angle easy, when used as a stand mounted microphone.

DESIGNED FOR VERSATILITY

Characteristics of design and styling make the BK-1A desirable for:

Broadcasts where the microphone should blend with the scene.

Programs where the performer must work close to the microphone.

Audience participation shows where an attractive, yet lightweight hand-held microphone is desired.

Sports, remotes outdoors where the microphone needs to be sturdy, easy to handle, and able to withstand all kinds of weather.

Public address system use.

SPECIFICATIONS

Mechanical

Length	7 $\frac{3}{4}$ " (including mounting)
Diameter	1 $\frac{7}{8}$ "
Weight	18 oz. (less cable)
Cable (MI-43-B, three conductor shielded)	30' (no plug)
Stand Fitting	$\frac{1}{2}$ " pipe thread
Finish	TV gray and chrome
Weight of Base	19 oz.
Diameter of Base	4 $\frac{1}{2}$ "

Electrical and Acoustical

Effective Output Level	-52 dbm*
Frequency Response	60-10,000 cycles
Output Impedance	30/150/250 ohms (connected for 250 ohms when shipped)

RTMA Rating (G_{30}):

250 Ohms	-144 db
150 Ohms	-147 db
30 Ohms	-148 db

Directional Characteristic:

Semi-directional	When mounted horizontally
Non-directional	When mounted vertically
Recommended Load Impedance	Unloaded input transformer
Hum Pickup Level	-102 dbm (.001 gauss)
Stock Identification	MI-11007

Accessories

Base for BK-1A, Type KS-11A	MI-11008
Floor Stand, Type 90-AS	MI-4098
Microphone Cable Plug, Male, Cannon Type	MI-4630-B

* Referred to one milliwatt and a sound pressure 10 dynes/cm².

