

OPERATING INSTRUCTIONS FOR KB-100 SPEAKER

INTRODUCTION

The KING BISCUIT KB-100 is a self-contained remote intercom station utilizing a speaker and a hand-held microphone with a push-to-talk (P.T.T.) switch instead of a headset. This unit was designed to replace the RS-100 remote station in applications where ambient noise is not a problem.

An anti-side tone circuit is built into the unit which will allow the simultaneous use of the microphone and the speaker. This circuit will prevent any signal from the microphone of a KING BISCUIT from appearing in the speaker of that unit, thus cancelling any feedback. The proper operation of this feature requires that the KING BISCUIT be balanced into the rest of the system.

OPERATION

To place the KB-100 in operation plug an interconnect cable from a main station or another remote station into either of the 3-pin connectors on the left side of the unit. (Note: The male and female connectors are wired in parallel.) Press call button to verify that the unit is operating. The unit must now be balanced into the system with the anti-side tone control. To accomplish this turn the volume control approximately 1/4 turn clockwise and while speaking into the microphone with the P.T.T. switch on the microphone depressed, adjust the anti-side tone control for minimum output from the speaker. (Note: This adjustment is sensitive to the number of stations in the systems and the setting of the master gain control on the main station. Therefore it should be made after the rest of the system is connected and the systems master gain control level is set for use.) If the KB-100 is used at the end of very long lines (2,000 feet or more) the anti-side tone control may become less effective due to the distributed capacitance of the cable being used.

HANDS OFF OPERATION

The KB-100 can be modified for hands off use. This is accomplished by wiring a jumper across the P.T.T. switch in the microphone as shown in Figure 2. This leaves the microphone permanently on. For temporary hands off operation place a large rubber band around the microphone to depress the P.T.T. switch.

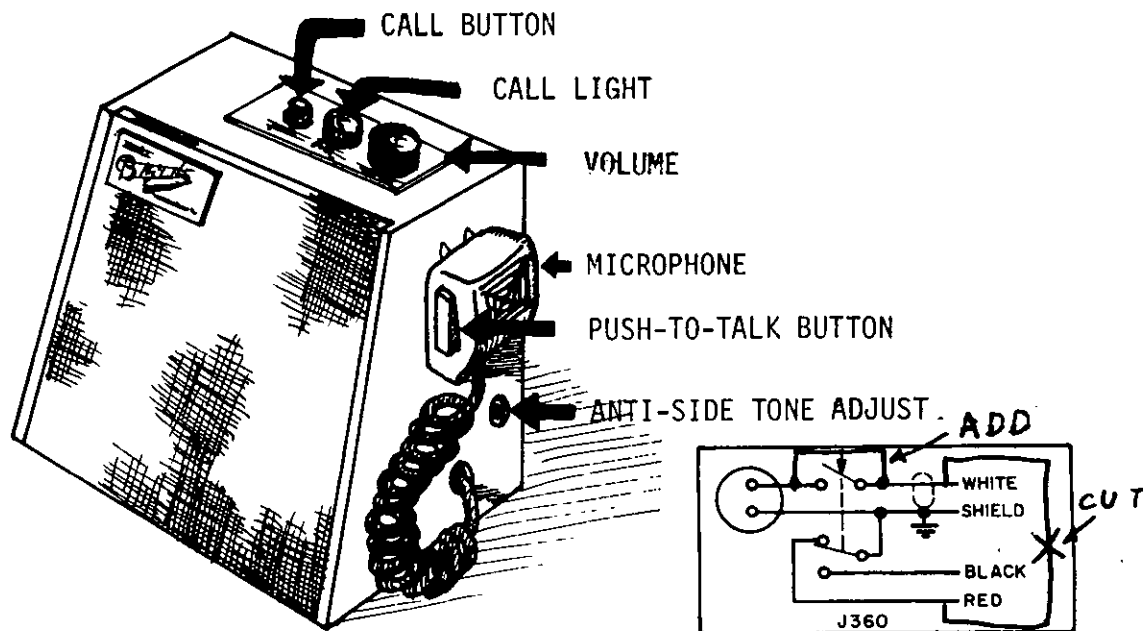
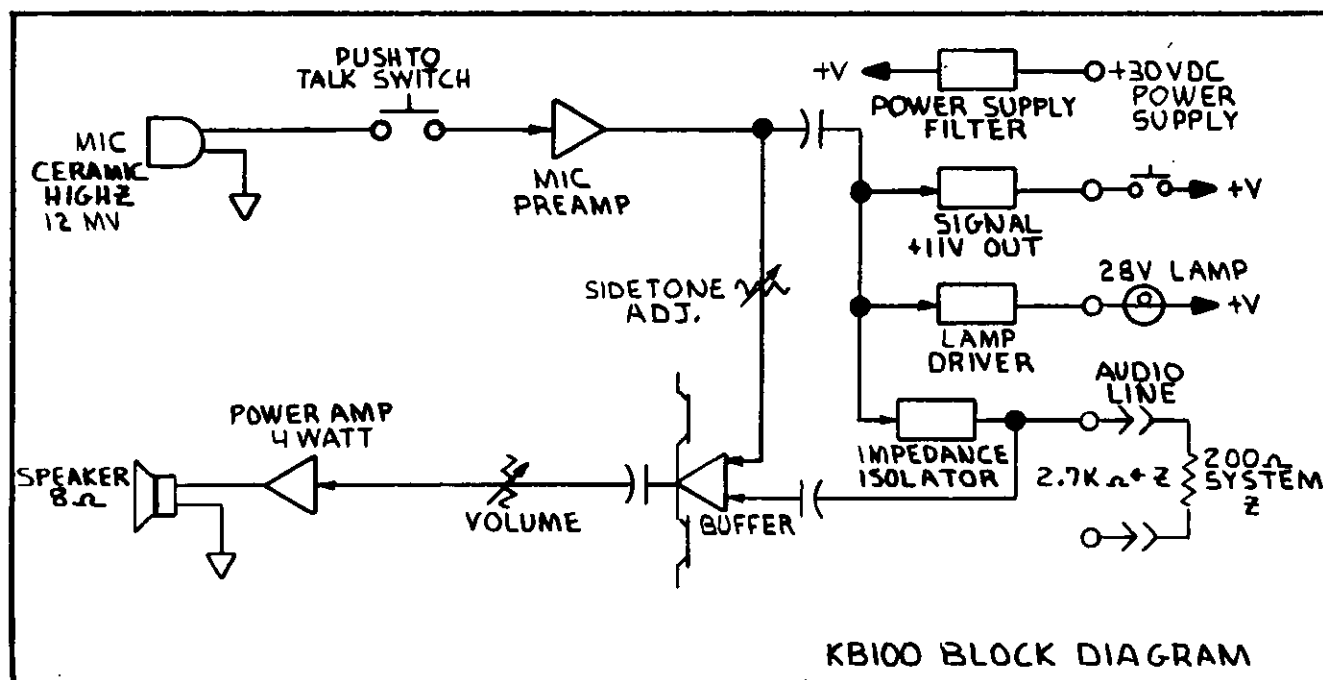


Fig. 2

CLEAR-COM KB-100

PARTS LIST

<u>Reference Des.</u>	<u>Clear-Com Part #</u>	<u>Description</u>
P1	#4704	Volume Control 2K Rev. Log Taper
P2	#4702	1K Pot, Screwdrive adjustable.
PC1	#7111	Amplifier Module
L1	#3900	Call Light Assembly
SP1	#5000	Speaker 8 ohm 4W
I1	#3901	GE #327 Lamp
J1	#2103	D3M Connector
J2	#2102	D3F Connector
M1	#5004	Hi-Z Ceramic Mic - Turner 360
S1	#5100	Momentary pushbutton



KB-100 SPECIFICATIONS

AMPLIFIER DESIGN

Solid state, integrated circuit amplifiers which include a mic preamp, headset power amp and signalling circuitry. Current limited with short circuit and reverse polarity protection.

MIC PREAMPLIFIER

Frequency Response: 200-12kHz with contoured response to enhance voice intelligibility.
Mic Input: 47k ohms
Mic Preamp Gain: 29dB
Max Input Before Clipping: -19dB
Microphone Type: Ceramic, high Z, PTT

SPEAKER AMPLIFIER

Output Impedance: 8-50 ohms
Power Output: 4 watts into 8 ohms
Frequency Response: 250-10kHz +3dB
Distortion: <0.5% THD @ 1kHz

GENERAL

Signalling Voltage: 11 volts DC on audio line
Call Light Sensitivity: 4 volts
Signal-to-Noise: 75dB
Line Impedance: 2.7k ohms bridging
Side Tone Adjustment: 25dB min.
Power Requirements: 20 ma quiescent, 60 ma average talk, 60 ma signalling, 200 ma short circuit.
Voltage Range: 18-30 volts, 28 volts nominal.
Baffle: Walnut veneer plywood
Dimensions: 6.5" X 6" X 4.75" Deep
Weight: 3 lbs.

