

# **Installation & Operating Instructions**

## ModBox™ Paging Kit Part No. KOV-106-000-06

### Introduction

These instructions provide installation and operating procedures for the ModBox Paging Kit. This paging kit enables a jukebox to be used as a public-address system for making announcements via a microphone located up to 50 feet away.

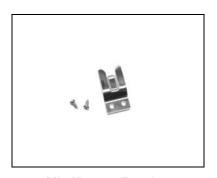
### **Paging Kit Parts**



Microphone



50 ft. Cable



**Mic Hanger Bracket** 



**Paging Mic Adaptor** 

Description	P/N	Qty
Microphone	EC1935-01	1
Mic Hanger Bracket (with mounting screws)	HW4613-01	1
Paging Mic Adaptor	EC1933-01	1
Cable, 50 ft	EC1918-01	1
Instructions	PM0560-01	1

#### **Tools Required For Installation**

Screwdriver, #1 phillips head

#### Installation Procedure

1. Turn power to the jukebox OFF.

**NOTE:** Skip shaded steps **2**, **3**, **4**, **11**, **14** and **15** if the jukebox has the 50 ft. Cable (refer to Paging Kit Parts) already installed.

- 2. Open the jukebox's front door and locate its **MICROPHONE INPUT** connector and **MUSIC LEVEL DURING PAGING** volume control [refer to Figure 1].
- 3. Route the Paging Kit's 50-foot cable through the jukebox's rear access cover and plug it into the **MICROPHONE INPUT** connector.

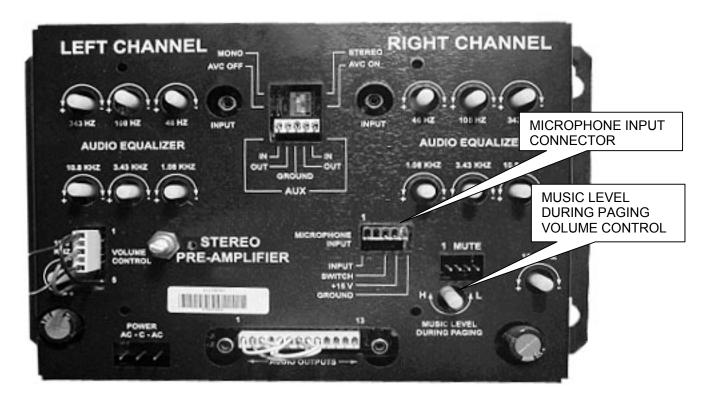


Figure 1 - Typical Jukebox Preamp

- 4. Temporarily position the Paging Mic Adaptor near the jukebox.
- 5. Plug the circular 5-pin connector end of the 50-foot cable into the Mic Adaptor's connector labeled **TO JUKEBOX** [refer to Figure 2].
- 6. Plug the Microphone from the Paging Kit into the Mic Adaptor's **MIC IN "B"** input and gently tighten its threaded retaining collar.

- 7. Turn the Mic Adaptor's **VOLUME** control OFF (fully counterclockwise) and move its 3-position **MIC A CONTROL** switch to the MUTE (center) position.
- 8. Turn power to the jukebox ON and verify the green power indicator light on the Mic Adaptor (located above its volume control) is illuminated.

**NOTE**: If the power indicator light is not lit this indicates a connection problem may exist between the jukebox and Mic Adaptor. Before proceeding, carefully recheck the 50-foot cable connections at both ends.



Figure 2 - Paging Mic Adaptor

9. Once you've verified the Mic Adaptor is receiving power, gradually turn its **VOLUME** control UP (clockwise) while talking into the microphone with its push-to-talk switch depressed [refer to Figure 3]. When the volume has been turned up sufficiently you should begin to hear your voice through the jukebox's speakers. Continue turning the control further clockwise until an appropriate microphone volume for paging is obtained.

**CAUTION:** If you encounter feedback (loud, unpleasant squealing sound) while setting paging volume, temporarily mute the microphone (by releasing its push-to-talk switch) and move it further away from the jukebox's speakers before resuming volume adjustment.



Figure 3 - Paging Kit Microphone

- 10. While playing music on the jukebox, adjust its MUSIC LEVEL DURING PAGING volume control for a suitable reduction in music loudness during paging to enable pages to be clearly heard above the music. This can be accomplished by repeatedly depressing then releasing the microphone's push-to-talk switch and comparing the normal music level to the reduced volume level when the switch is depressed.
- 11. Turn power to the jukebox OFF, then disconnect the 50-foot cable from the Mic Adaptor (while leaving the other cable end plugged into the jukebox's MICROPHONE INPUT connector).
- 12. Find a suitable location to mount the Mic Adaptor and Mic Hanger Bracket (such as in your office, or near your phone). Keep it away from liquids and places where it may be repeatedly bumped by utensils, etc,.

**NOTE:** If the desired microphone location is at a distance greater than 50 feet from the jukebox, a custom cable or extension for the 50-foot cable will be required in order to connect the Mic Adaptor to the jukebox. The Paging Kit's microphone has a coil cord which can be extended up to 5 feet from the Mic Adaptor, however it's strongly recommended that the Mic Adaptor and Hanger Bracket be mounted within 3 feet of the desired microphone location to facilitate convenient microphone operation and storage.

- 13. Securely attach the Mic Adaptor and Mic Hanger Bracket to a wall or other convenient mounting surface in the selected location, using #6 wood screws; a pair of mounting screws for the Mic Hanger Bracket are included in the kit.
- 14. Route the 50-foot cable from the jukebox to the Mic Adaptor, while leaving the cable's other end plugged into the jukebox's **MICROPHONE INPUT** connector.
- 15. Plug the 50-foot cable into the Mic Adaptor's connector labeled **TO JUKEBOX**, then turn power to the jukebox ON and verify the Mic Adaptor's power indicator light is illuminated.

- 16. Verify proper Paging Kit operation by making several test pages, and re-adjusting microphone volume as necessary using the Mic Adaptor's **VOLUME** control.
- 17. If you want to use an alternate microphone in place of the handheld CB-style mic included in the Paging Kit, disconnect the kit's microphone from the Mic Adaptor and plug the alternate microphone into either the 1/4" phone **MIC IN "A"** or CB-style **MIC IN "B"** input. The "**A"** input is compatible with most PA-style handheld microphones, while the "**B"** input is intended primarily for use with CB-style microphones which have a push-to-talk switch.

#### **General Operating Procedures**

- When using a CB-style microphone which has a push-to-talk switch (such as the microphone included in the Paging Kit) the Mic Adaptor's 3-position MIC A CONTROL switch should be left in its MUTE (center) position and the mic's push-to-talk switch used to activate paging. To initiate a page, press the microphone's push-to-talk switch and speak directly into the mic with it positioned about 1" from your mouth. Once the page is completed, release the push-to-talk switch to mute the mic and return the jukebox to normal operation.
- When using a PA-style microphone plugged into the Paging Mic Adaptor's MIC IN "A" input (1/4" phone jack), the CB-style "B" input will be automatically disabled. To page with a PA-style microphone (which doesn't have a push-to-talk switch) the Mic Adaptor's MIC A CONTROL switch must either be pushed upward and held in the MOMENTARY TALK position during the page, or pushed down to latch it in the CONTINUOUS TALK position at the start of a page, then returned to its MUTE (center) position upon completing the page.

While the **MIC A CONTROL** switch is in either its MOMENTARY or CONTINUOUS TALK position, the paging microphone remains 'live' and the jukebox's music volume will be determined by the setting of its **MUSIC LEVEL DURING PAGING** volume control. To avoid disrupting normal jukebox use, the **MIC A CONTROL** switch should always remain in its MUTE (center) position except while paging.

## **Using Other Microphones**

The pro-grade CB microphone included in the Jukebox Paging Kit provides excellent speech presence and intelligibility for most paging applications, along with superior durability as a result of its heavy duty coil cord and rugged metal hanger. Since the Paging Kit's Mic Adaptor includes both CB and 1/4" phone jack mic inputs, it's possible to substitute other types of microphones, which may have unique advantages for your particular paging application. Here's a few other microphone types you might want to consider using:

- 1. A desktop [rather than handheld] CB-style microphone, with a push-to-talk switch built into its stand.
- 2. A handheld or desktop CB-style microphone incorporating noise-cancellation technology. Though not required for most paging applications, these mics can dramatically reduce the amount of background noise picked up by the microphone when

paging in high-noise environments; they can also substantially reduce feedback problems if it's necessary to page at high volume, or within a few feet of a jukebox speaker.

- 3. A handheld or stand-mounted PA-style microphone. These microphones typically have a wider, flatter frequency response than a CB-style mic resulting in fuller, more natural-sounding voice quality; however, they usually don't provide paging intelligibility comparable to the tailored frequency response of a high quality CB-style mic, and also lack the convenience of a CB mic's built in push-to-talk switch.
- 4. A handheld or desktop microphone with a condensor pickup element. These microphones can provide very high fidelity, but must be powered by a battery located inside the microphone housing.

**CAUTION:** Some battery-powered microphones output a signal level MUCH higher than a typical dynamic or condensor microphone. Though such high-output mics will work with the Paging Kit's Mic Adaptor, their use is generally not advised because the Adaptor's volume control would need to be set so low that it would be difficult to adjust for correct paging volume.

## **Microphone Wiring**

For a CB-style microphone to work properly with the Paging Kit's Mic Adaptor, it must be equipped with a standard 4-contact 'CB Mic' connector wired as follows:

Pin#	Signal
1	Ground
2	Audio
3	Transmit Enable (low true)
4	

For a PA-style microphone (without a push-to-talk switch) to work properly with the Paging Kit's Mic Adaptor, it must be equipped with either a mono or stereo 1/4" phone plug wired as follows:

Pin#	Signal
Sleeve	Ground
Tip	Audio +
Ring	Audio - (only applicable for a balanced mic with a 3-contact stereo plug)