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# **BavCom™ One on One Audio System**

## **Installation and Service Manual**

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# BavCom™ One on One Audio

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## BavCom™ One on One Audio

The BavCom™ One on One audio system lets one inside position talk to one remote position.

### Features

- Full duplex operation
- Electret condenser microphone
- Proprietary closed back speaker for maximum efficiency and minimum feedback.
- Case is of heavy 16ga steel & 0.080" aluminum construction with a durable powder coated finish and discrete BavCom™ audio board/components.
- Inside microphone and speaker are built into the console unit.
- Built-in call tone is included in the console.
- Easy electrical connections.
  - One round plug-in jack for the AC power which comes from a UL Listed 24vac plug-in transformer. Convenient terminal barrier or Molex type connection for the remote speaker, microphone and call button.
- Two inside controls:
  - Rocker switch for Standby and ON.
  - Incoming volume control knob.
- Standard service adjustments.
  - Incoming and outgoing gain controls. See section labeled **ADJUSTMENT** for more information.

## **Installation**

### **Console:**

The console is designed to sit on the counter top. The speaker faces backward.

The power comes from a UL Listed transformer supplied with the kit, part number 01521011. Plug the round end of the transformer provided into the round jack at the rear of the console. Plug the transformer into a 120vac outlet.

### **Customer End:**

Make the customer audio component connections. These connections are via a 9 position pre-wired connector or a terminal barrier for easy plug-in, quick-slide, or screw type connections. See Fig. 1 for the order of connections.

### **External Audio Components:**

We supply many different types of external audio components. These must be selected to suit the needs of the applications. The rugged, weatherized components that we supply are designed specifically for outdoor audio communication. Off the shelf Hi-Fidelity components are not weatherproof, nor were they designed for the rigors of the drive-thru environment, hence, they do not last long when used.

We have found that for proper sound quality, to reduce squealing and have sufficient gain levels, the speakers must have back-boxes. We supply back-boxes or closed back speakers in all of the audio systems we manufacture. In addition, we offer back-boxes for use in retrofit applications that may benefit from them. These parts can be ordered separately from the list below. If you need help in choosing the proper components, please contact us.

For a complete customer audio panel for use with the Transaction Drawer™, order P/N 00539992. This is an engineered solution which includes matching black powder coated trim, mounting plates, speaker, isolation mounted microphone with acoustical back-box, and a call button all with 10' leads.

Separate microphones and pre-amps are available in various versions:

25" boom type with 3/8" threaded stem and nut, typically used for inside positions, microphone part number 02908033, pre-amp part number 02908231.

36" boom type with 3/8" threaded stem and nut, part number 02908032.

Boom type with flat mounting plate is available under part number 02908191.

Diamond style that includes a molded housing that is designed for surface mounting, microphone part number 02910992, pre-amp part number 02908241. This type is secured from the rear with screws.

Black flange microphone kit, part number 22151991.

Separate speakers are also available in a variety.

50mm with flush mounting plate which features integral grill, part number 09033121.

50mm with adapter plate to replace 4" speaker assembly, part number 02909992

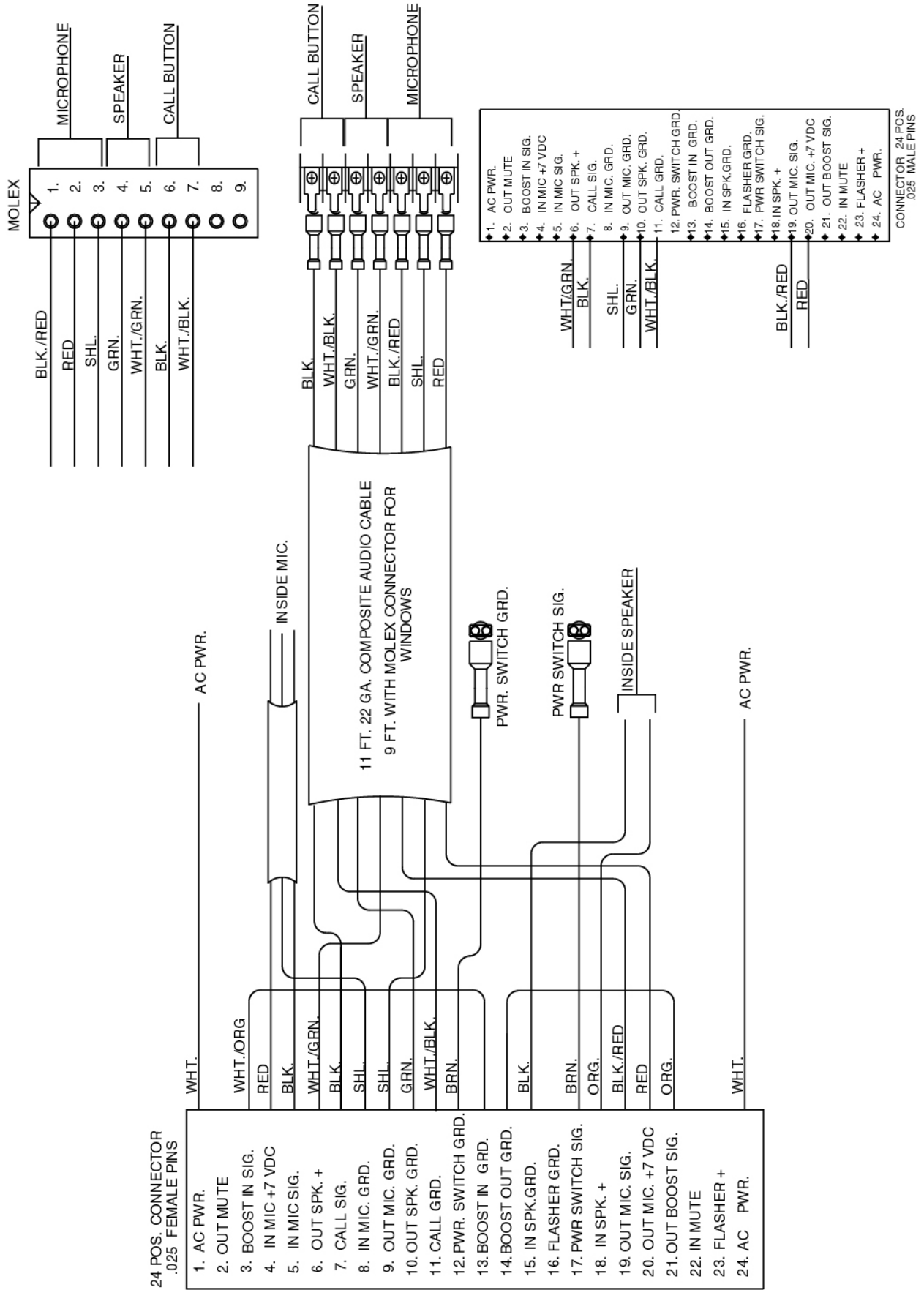
Separate call buttons are available in various types.

Call Button Replacement Kit, part number 00353991

Polyester identifying labels, part number 00207012

Composite cable, part number 02910011, is available by the foot. This has 3 pairs in one cable and was especially designed and made for our audio.

# CONNECTING CABLE(S) DIAGRAM





## Adjustment

It is necessary to disassemble the console to adjust the gain controls. Disassembly of the console is done by removing the four screws on the bottom of the console that secure the top to the bottom. Carefully separate the two halves. For details on the location of the adjustments, see Figure 1. The adjustments are labeled on the board.

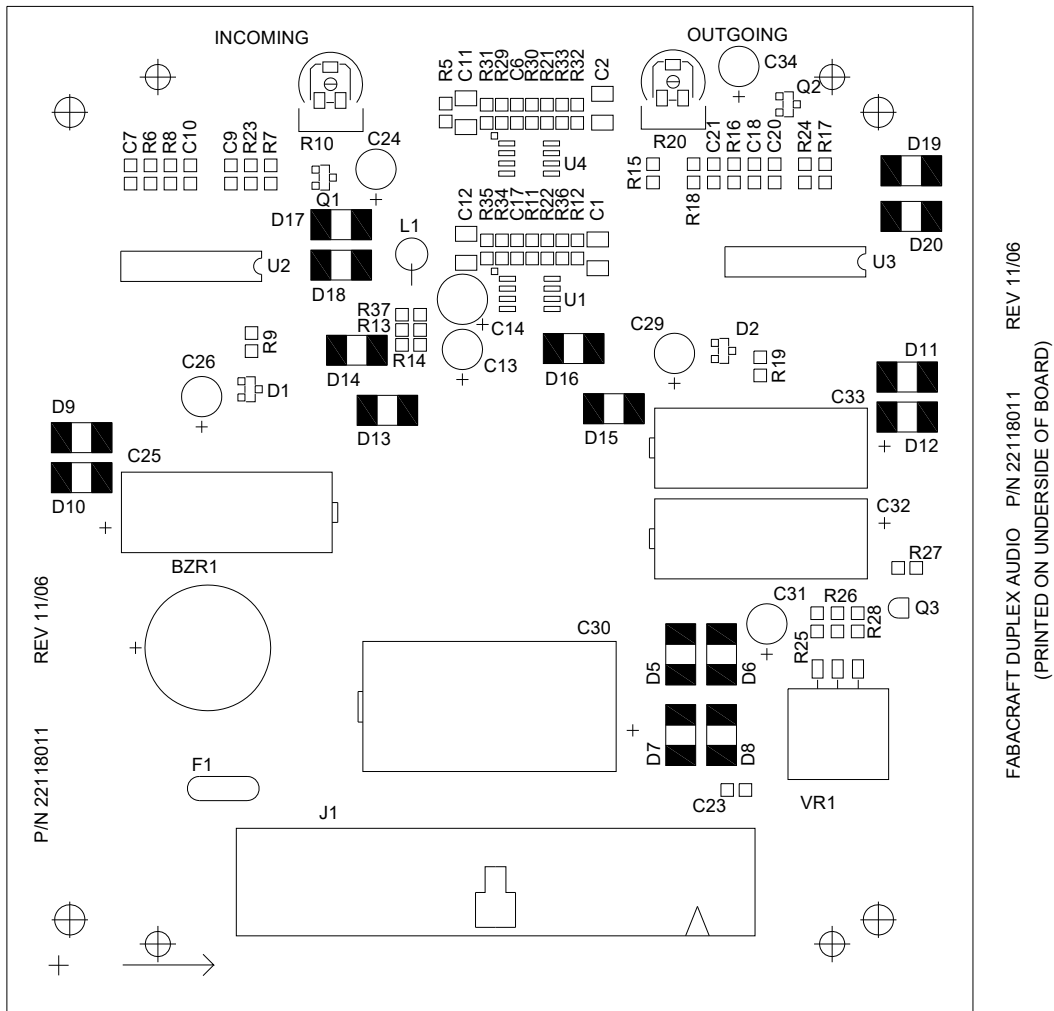


Fig. 1

With the employee speaking in the inside microphone and a car present, the outgoing gain control should then be adjusted for satisfactory volume. The incoming gain control should then be adjusted clockwise until feedback occurs, then counterclockwise until feedback stops. This should complete the adjustment. If the incoming level is not sufficiently high enough, the outgoing level will have to be reduced to be able to get additional incoming volume level. The gain levels are a balance; adjustment of each has an effect on the other. If the incoming level is too high, adjust it to a lower level. Reassemble the console. **Note: The incoming volume knob should be all the way clockwise for this procedure.**

## Troubleshooting

### *Audio doesn't work*

Outlet on?

Transformer plugged in?

Check for 24vac at connector end. No 24vac? Replace transformer.

Still doesn't work? Replace console.

### *No incoming* (Assumes outgoing audio)

Adjust gain.

Doesn't work? Replace remote microphone.

Doesn't work? Replace console speaker.

Doesn't work? Replace audio board.

Doesn't work? Consult factory.

### *No outgoing* (Assumes incoming audio)

Adjust gain.

Doesn't work? Replace console microphone.

Doesn't work? Replace remote speaker.

Doesn't work? Replace audio board.

Doesn't work? Consult factory.

### *No call tone* (Assumes audio works)

Check call button for continuity when depressed with leads disconnected.

No continuity? Replace button.

Continuity? Replace audio board.

Doesn't work? Consult factory.

## **Installation and service tool list for audio**

1/8" And 3/8" Flathead Screwdrivers  
#0 And #2 Phillips Screwdrivers  
1/16" And 3/32" Allen Wrenches  
1/2" Open-End Wrench  
1/4", 5/16", 11/32", 3/8", And 1/2" Nut Drivers  
Wire Cutters  
Wire Strippers  
Wire Crimpers  
Volt Meter  
Electric Drill  
Drill Bits  
Level  
7/8" Unibit  
Fish Tape  
Loctite

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