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2 on 4 Audio System Manual

BavSonic™ Two on Four Audio

Table of Contents

Safety Instructions	1
Features	2
Installation	3
Adjustment.....	4
Diagram Fig 1	5
Troubleshooting.....	6
Service and Installation Tool List.....	7

Important Safety Instructions

1. READ THESE INSTRUCTIONS
2. KEEP THESE INSTRUCTIONS
3. HEED ALL WARNINGS
4. FOLLOW ALL INSTRUCTIONS
5. DO NOT USE THIS APPARATUS NEAR WATER
6. CLEAN ONLY WITH A DRY CLOTH
7. DO NOT BLOCK ANY VENTILATION OPENINGS. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS
8. DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT
9. PROTECT THE POWER CORD FROM BEING WALKED ON OR PINCHED PARTICULARLY AT PLUGS, CONVENIENCE RECEPTACLES AND THE POINT WHERE THEY EXIT THE APPARATUS
10. ONLY USE ATTACHMENTS/ ACCESSORIES SPECIFIED BY THE MANUFACTURER
11. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL. SERVICING IS REQUIRED WHEN THE APPARATUS HAS BEEN DAMAGED IN ANY WAY, SUCH AS POWER-SUPPLY CORD OR PLUG IS DAMAGED, LIQUID HAS BEEN SPILLED OR OBJECTS FALLEN INTO THE APPARATUS, THE APPARATUS HAS BEEN EXPOSED TO RAIN OR MOISTURE, DOES NOT OPERATE NORMALLY OR HAS BEEN DROPPED.

Additional Safety Instructions

WARNING – TO REDUCE THE RISK OF FIRE OR ELECTRONIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

BavSonic™ Two on Four Audio

The BavSonic™ Two on Four audio system lets one inside position talk to two remote positions.

Features

- Full duplex operation
- Electret condenser microphone
- Proprietary closed back speaker for maximum efficiency and minimum feedback.
- Case is of 0.080 aluminum & 16 ga steel construction with a durable powder coated finish and discrete BavSonic audio board/components.
- Inside microphone and speaker are built into the console unit.
- Built-in call tone is included in the console. With this feature, the tone will sound when the call button is pushed, and will shut off after a preset amount of time. The tone will then come back on in the event that the lane has not yet been answered. The tone will cycle 5 times and then the system will reset itself.
- Built-in signal flasher.
- Easy electrical connections.
Convenient RJ45 connections for both consoles and all lanes.
The pushbuttons, LEDs, and call tone control is via serial communication to the switcher. If the console is unplugged communication is lost. When the console is plugged back communication is re-established and the console returns to its original state.
- Two inside controls:
Button panel for lane selection and standby.
Incoming volume control knob.
- Standard service adjustments.
Incoming gain control. See section labeled **ADJUSTMENT** for more information.
- Is Expandable to handle more than 4 lanes by adding more switchers.

Installation

Console:

The console is designed to sit on the counter top. There are two consoles for four lanes with the speakers facing backward.

Switcher:

Power is supplied to the switcher through a 110v power cord and is protected by a 4amp breaker. The consoles connect to the switcher via Cat 5 cabling.

Customer End:

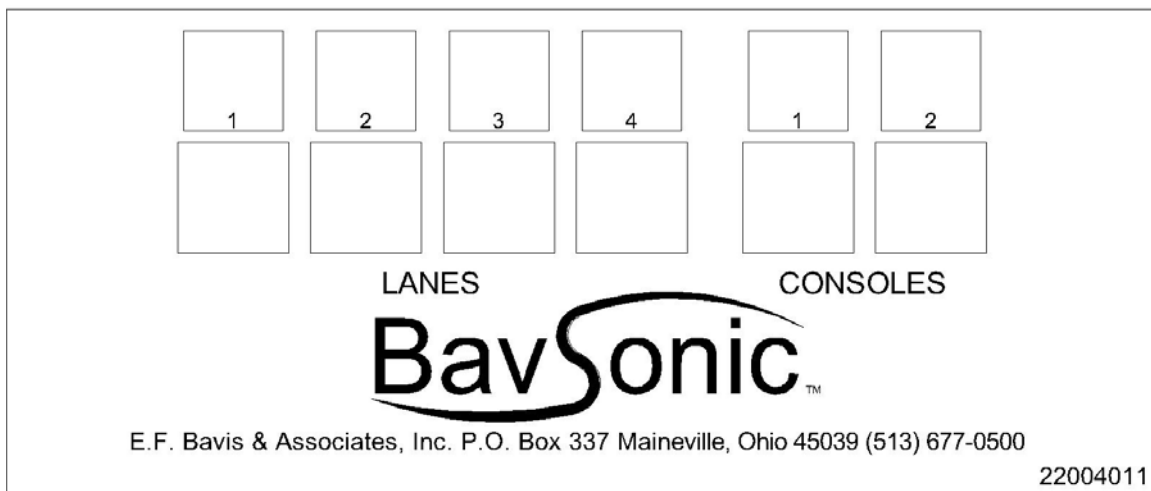
Make the customer audio component connections. Connections for all lanes and both consoles are via RJ45 plug-in connection. The connections for the lanes are located on the switcher assembly located under the counter. The consoles are connected to the switcher assembly using the Cat5 patch cables provided. For instructions on setting the lane selector see Figure 1.

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, and be properly sealed to the mounting surface. We supply backboxes or closed back speakers in all of the audio systems we manufacture. In addition, we offer backboxes for use in retrofit applications that may benefit from them. These parts can be ordered separately. 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 00539997. This is an engineered solution, which includes a black powder coated trim, mounting plates, speaker, isolation-mounted microphone with acoustical backbox, call button and 10' leads. Also available with a stainless steel trim, part number 00539998.



Adjustment

It is necessary to disassemble the console to adjust the gain control and designate which console is #1 and which is #2. Disassembly of the console is done by turning the spring-loaded thumbscrew on the back of the console that secures the top to the bottom. Carefully open the two halves. For details on the location of the adjustment and console selector see Figure 1.

The incoming gain control should 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 on the Audio Board at the Lane 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 volume is still low, check to see if the speaker back box is in place and the speaker leads have hot melt glue on them. If the incoming level is too high, adjust it to a lower level. Reassemble the console. **Note: The user incoming volume knob should be all the way clockwise for this procedure.**

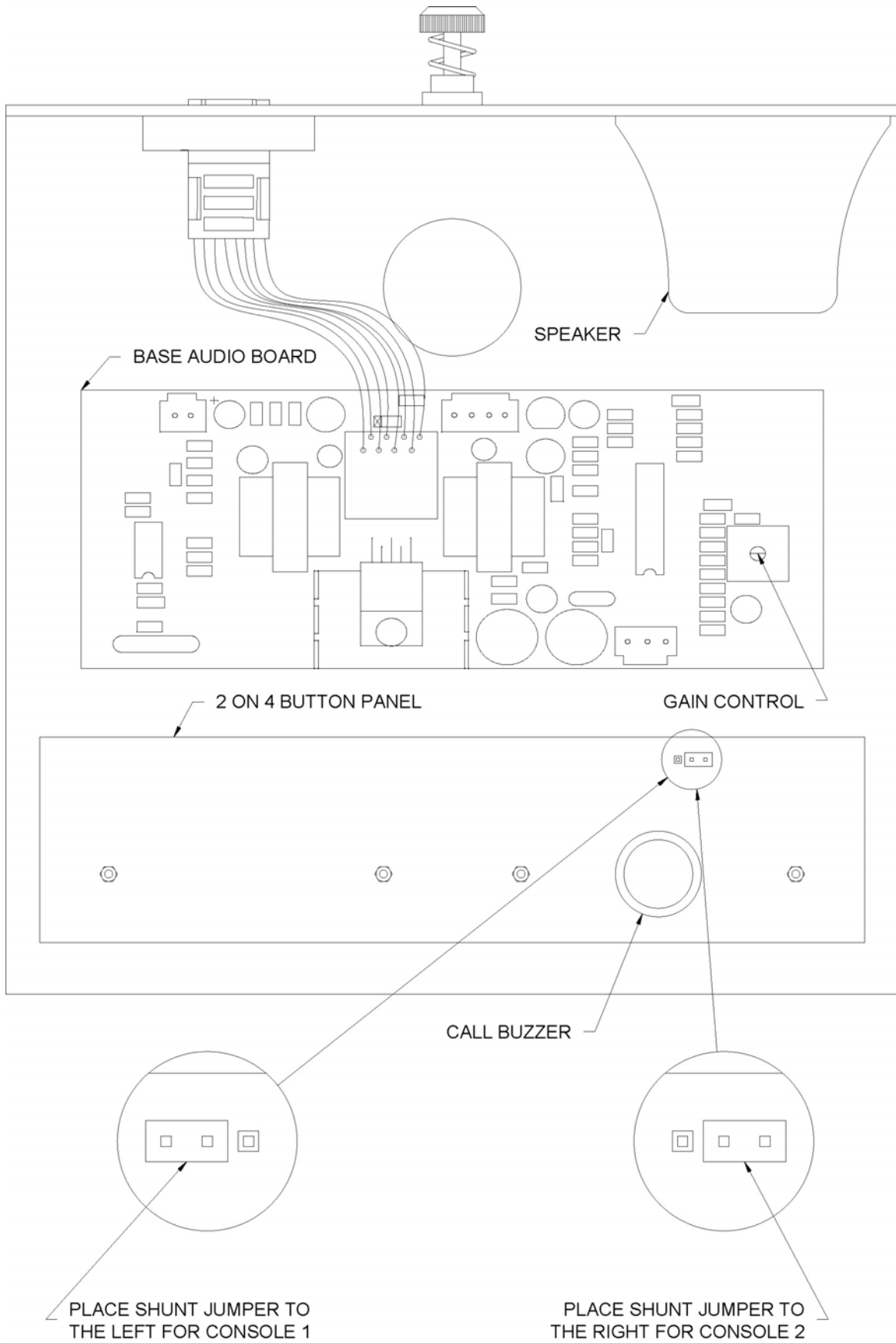


FIGURE 1

Troubleshooting

Audio doesn't work

Outlet on?
Switcher on?
Still doesn't work? Replace console.

No incoming (Assumes outgoing audio)

Check LED on board for light. No light? Check power to audio board.
No power? Check cables for short.
Good cables? Replace audio board.
Yes light? 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 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.

For assistance, call Technical Service at 1-800-937-3322.

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

Revised

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