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# Lane 1 BavSonic Universal Telephone Audio Diagnostics

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## **Table of Contents**

| BavSonic Universal Telephone Audio Test Procedure Overview | 1 |
|--|---|
| Froubleshooting Procedure                                  | 2 |
| Adjusting Outgoing Audio Level Diagram                     | 6 |
| Volume Adjustment on White Box with Black Label            | 7 |
| Replacement Part Numbers                                   | 8 |

### **BavSonic Universal Telephone Audio Test Procedure Overview**

This test procedure <u>only</u> applies to specific Bavis Fabacraft audio interfaces that are considered by Bavis Fabacraft as "UNIVERSAL", "UNIVERSAL WITH BEAM", "FXO, or "FXO WITH BEAM". The device can be designed as dual lane, or single lane, and will be identified by the number of lanes it can operate, color of the device casing, or a colored sticker on the device, which can be "YELLOW", "WHITE", or "GREEN".



Test the system to identify the actual issue by pressing the call button, wait for the staff to answer, and listen to the outgoing audio and then confirm that they can hear you clearly (incoming audio).

Verify that the problem exists on all phones. If it only occurs on just one phone, the problem is likely in that phone or the phone system.

If there is an issue in the BavSonic audio system, you will need to access to the under counter area to identify what kind of interface it is (color), confirm that it has power (this would be indicated by 1 or more flashing "NORMAL OPERATION" LED's). Two LED's will be on the face of a Dual Lane (DL) device and on LED will on the face of the Single Lane (SL) device. If the LED or LEDs are on and not flashing, that would indicate that there is a problem of some kind with the interface. Using a voltmeter, check the outlet to confirm that there is110-120 Vac power. If so, power down the interface by either switching the toggle switch on the face of the interface to the "OFF" position or unplugging the device from the power source (the audio power outlet should be located in the undercounter area, and the cable may have a flag on it that reads "AUDIO POWER"), wait for 10 -20 seconds, and re-apply power to the device.

### **Troubleshooting procedure**

<u>Note:</u> The parts shipped for use in this procedure are for testing purposes only and should only be left in place as a replacement part if an audio improvement is realized. Please return any parts that are not needed for audio improvement to Bavis Fabacraft using the return labels provided.

Confirm what type of phone system is being used, (i.e., cisco, Nortel, etc...). Note: Some static is to be expected with our analog interface being used on a digital phone system. Also, "dirty" outlet power, (something else plugged into the same power circuit, like a motor), could also create static. Try plugging the interface into a different outlet to see if the sound is clearer.

If the issue exists on every phone in the pharmacy, use the test phone provided to isolate the telephone system from the audio system. This is achieved by unplugging the phone system cable from the telephone connection port on the interface and plugging in the test phone. If the sound quality is good, the issue may be with eh site/building telephone system. If the issue still exists, follow the procedures below to identify what part, or parts may be needed to resolve the issue.

- 1. If the issue is feedback, you may be able to reduce the level of feedback by turning down the Outgoing volume on the base audio board located either directly under the drawer, or around the drawer under the counter. Follow the cat5 cable from the interface to locate the base audio board. If after you have done this you still have feedback, proceed to the next step.
- 2. If the issue is that the telephones do not ring when the call button is pressed, check to see if the "RINGING" LED is lit on the interface.

- a. If it is, that would indicate that the signal from the call button is reaching the interface. Using a test telephone, test the system as a standalone system to see if the test telephone will ring.
  - i. If it does, the site/building's telephone system may have an issue. Leave the test telephone hooked into the system so the site can resume operation.
- b. If it is not, unplug the call button, bring the call button into the building, plug it directly into the base audio board, and retest.
  - i. If the "RINGING" LED lights up, replace the call button extension cable.
  - ii. If the "RINGING" LED still does not light up, test the system using a new call button.
  - iii. If the "RINGING" LED lights up, replace the call button.
  - iv. If the "RINGING" LED still does not light up, test the system using a new base audio board (remember to set the gain potentiometer to halfway).
  - v. If the "RINGING" LED lights up, replace the base audio board.
  - vi. If the "RINGING" LED still does not light up, contact Bavis Fabacraft services.
- 3. If the issue is poor or no incoming audio, unplug the microphone, bring it into the building, plug it directly into the base audio board, and retest.
  - a. If you achieve better or incoming audio, replace the mic extension cable.
  - b. If you still have poor or no incoming audio, go back outside, and plug in the new microphone.
  - c. If you achieve better or incoming audio, replace the microphone.
  - d. If you still have poor or no incoming audio, test the system using the new base audio board (remember to set the gain potentiometer to halfway).
  - e. If you achieve better or incoming audio, replace the base audio board.
  - f. If you still have poor or no incoming audio, you can try running the audio through the other channel in the interface (see below for instructions on how to do this).
- 4. If the issue is poor or no outgoing audio, unplug the speaker, bring it into the building, plug it directly into the base audio board, and retest.
  - a. If you achieve better or outgoing audio, replace the speaker extension cable.
  - b. If you still have poor or no outgoing audio, go back outside, and plug in the new speaker.

- c. If you achieve better or outgoing audio, replace the speaker.
- d. If you still have poor or no outgoing audio, test the system using the new base audio board (remember to set the gain potentiometer to halfway).
- e. If you achieve better or outgoing audio, replace the base audio board.
- f. If you still have poor or no outgoing audio, you can try running the audio through the other channel on a dual lane interface (see below for instructions on how to do this).

The single lane (SL) Universal Telephone Audio Interface has a built-in test feature. The test feature works whether the interface is connected to a telephone (system) or not. Pressing the audio test button activates the test mode. By going outside and then pressing the call button will cause the outside microphone to be connected to the outside speaker at half volume. This mode stays active for 5 minutes or until the telephone system goes off hook.



If after trying all the steps above, and your audio is still not working, that would indicate that the "WINDOW" channel (dual lane interface) or the interface itself (single lane interface) is bad.

If your location has a remote lane, check to see if the audio is working properly. If it is, you can run the "WINDOW" audio through the "REMOTE" channel of the interface (dual lane interface only) or if the remote lane has a "SINGLE LANE" device, try moving the cables from the lane one device to the lane two device, and retest.

\*NOTE\* The "REMOTE" connection port for the dual lane interface is an eight-position green terminal connector. If you determine that you need to utilize the "REMOTE" port on a dual lane interface and this connector is missing, consult Bavis Fabacraft services.

To connect a "WINDOW" cable to the "REMOTE" side of a dual lane interface, power down the interface, unplug the cable from the "WINDOW" port, measure six inches back up the cable from the RJ45 connector, and cut the cable, (this will allow you to be able to re-splice the cable back together in the event that the lane two side of the interface is not working properly). Strip the outer jacket from the cable and connect the wires to the green eight position terminal plug in the color sequence stated on the label of the interface.

Before having your paperwork signed off and leaving the location, pull your vehicle into the lane, press the call button, and confirm with store personnel that the audio system is working.

#### **Adjusting Outgoing Audio Level Diagram**





#### Volume Adjustment on White Box with Black Label

#### **<u>Replacement Part Numbers</u>**:

Call Button Replacement Kit – 00353991 Call Button Extension Cable – 22145011

Black Rainshield Mic Kit – 22151991 120in Mic Extension Cable - 01614031

50mm Replacement speaker kit – 02909995 10ft Speaker Harness – 22144011

REV5 Inside Base Audio Board – 02984013 Inside BEAM Base Audio Board – 02984014

Slimline Telephone – 22186013 RJ45-Terminal Barrier Adapter – 22209591

#### **Revisions:**

ECN Date