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BavSonic™ One on Two Audio System

Installation and Service Manual

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Revised: 09/09/2014
PN: 00635011

BavSonic™ One on Two Audio

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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

1. WARNING – TO REDUCE THE RISK OF FIRE OR ELECTRONIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
2. ONLY USE TAMURA MODEL 420AS20045 OR TRIAD WAU20-500 AC ADAPTER WITH THIS APPARATUS

Revised, September 8, 2014

BavSonic™ One on Two Audio

The BavSonic™ One on Two 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 heavy 16ga steel, 0.080 aluminum & 11ga 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.
One round plug-in jack for the AC power which comes from a UL Listed 18vac plug-in transformer. Convenient terminal barrier connection for the remote Lane, RJ45 connection for Window Lane.
- Two inside controls:
Button panel for lane selection and quiet.
Incoming volume control knob.
- Standard service adjustments.
Incoming gain control. See section labeled **ADJUSTMENT** for more information.
- Available in handset only or handset/hands free options for private conversations.

Installation

Console:

The console is designed to sit on the counter top. There is one console for both lanes with the speaker facing backward.

The power comes from a UL Listed transformer supplied with the kit, part number 01521024. Plug the round end of the transformer provided into the round jack on the board, inside the console. Plug the transformer into a 120vac outlet.

Customer End:

Make the customer audio component connections. Connections for Lane 2 are via a terminal barrier for easy screw type connection. Lane 1 has RJ45 plug-in connection. These cables are fed through the access hole in the back of the console.

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 24031991. This is an engineered solution which includes matching black powder coated trim, mounting plates, speaker, isolation mounted microphone with acoustical backbox, call button, audio board and leads.

Units with handset:

For private conversations, we offer a handset only version of the 1 on 2 system which requires all communication to be via handset, and a handset/hands free version which switches the mic and speaker from the console to the handset allowing both the convenience of hands free operation and privacy for delicate conversations.

Adjustment

It is necessary to disassemble the console to adjust the gain control. 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 see Fig 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.** For handset/hands free units, check handset volume as well. See Figures 3 & 4 for wiring diagrams of the handset options.

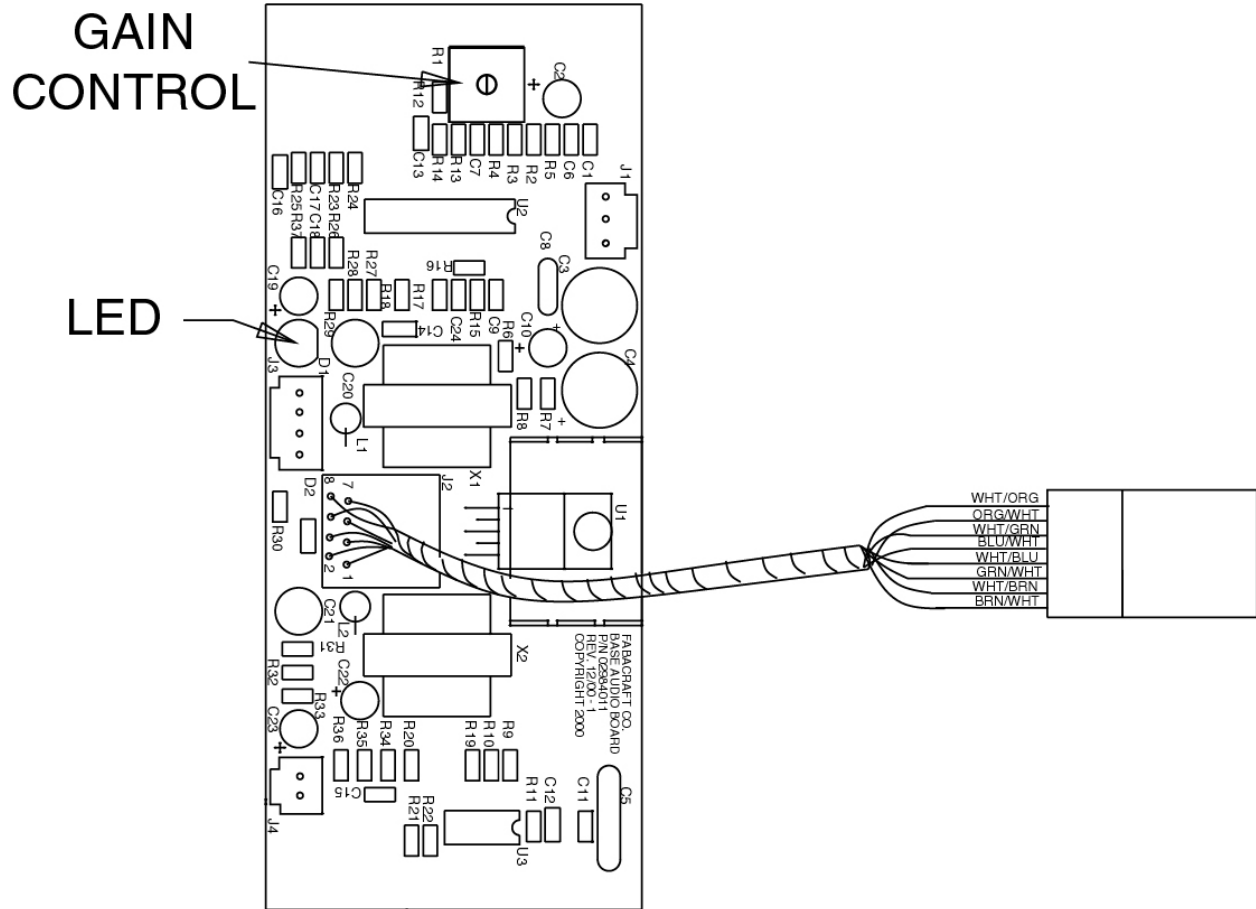


FIG.1

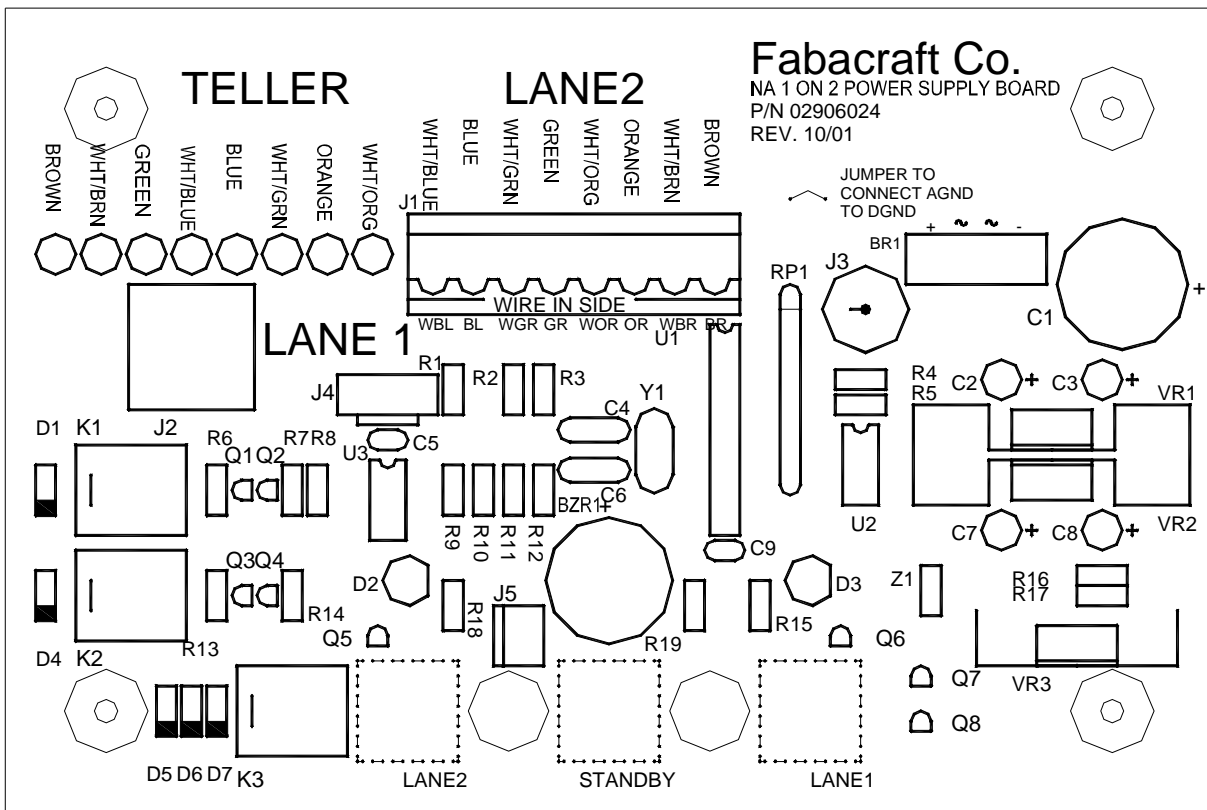


FIG 2.

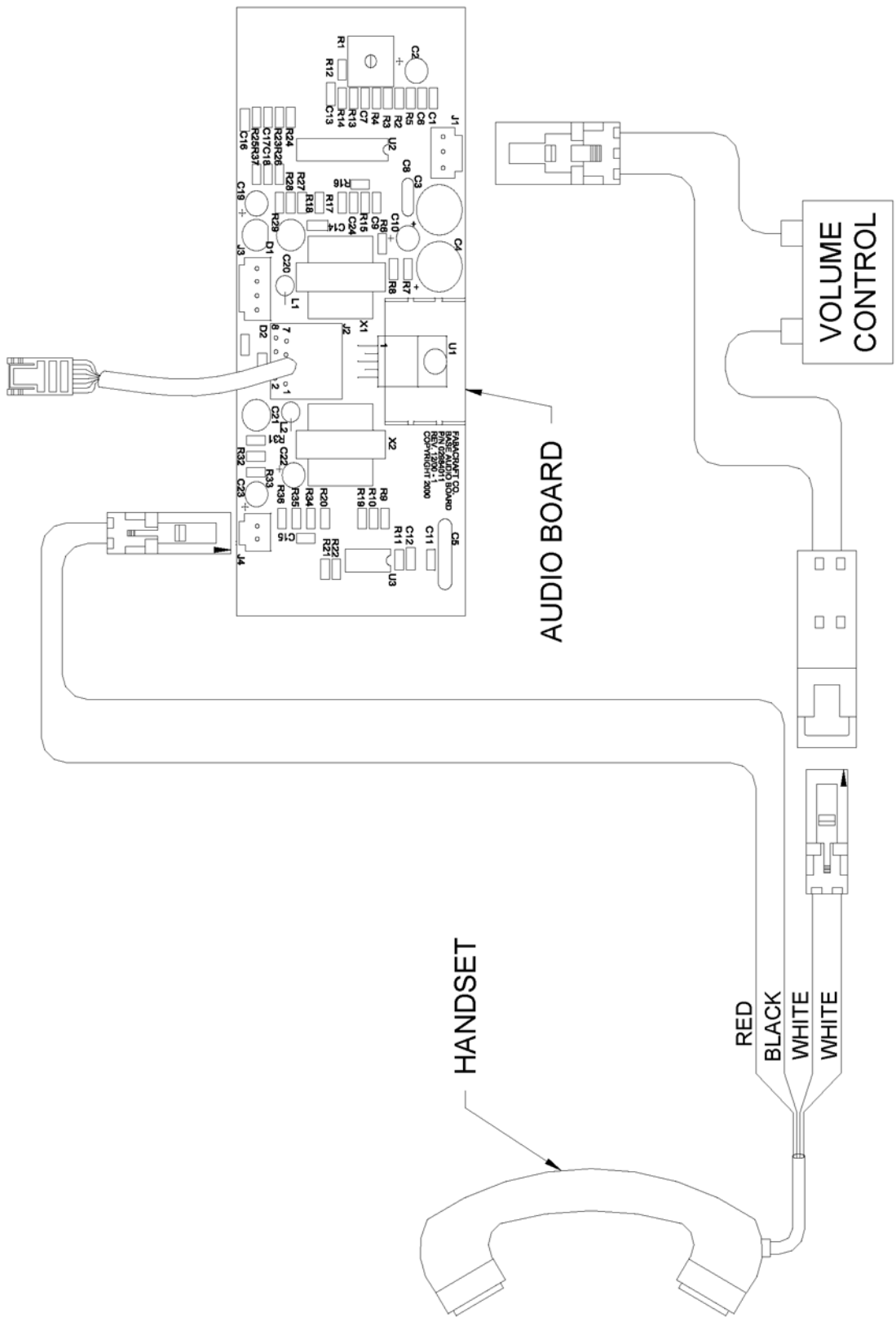


FIG 3.

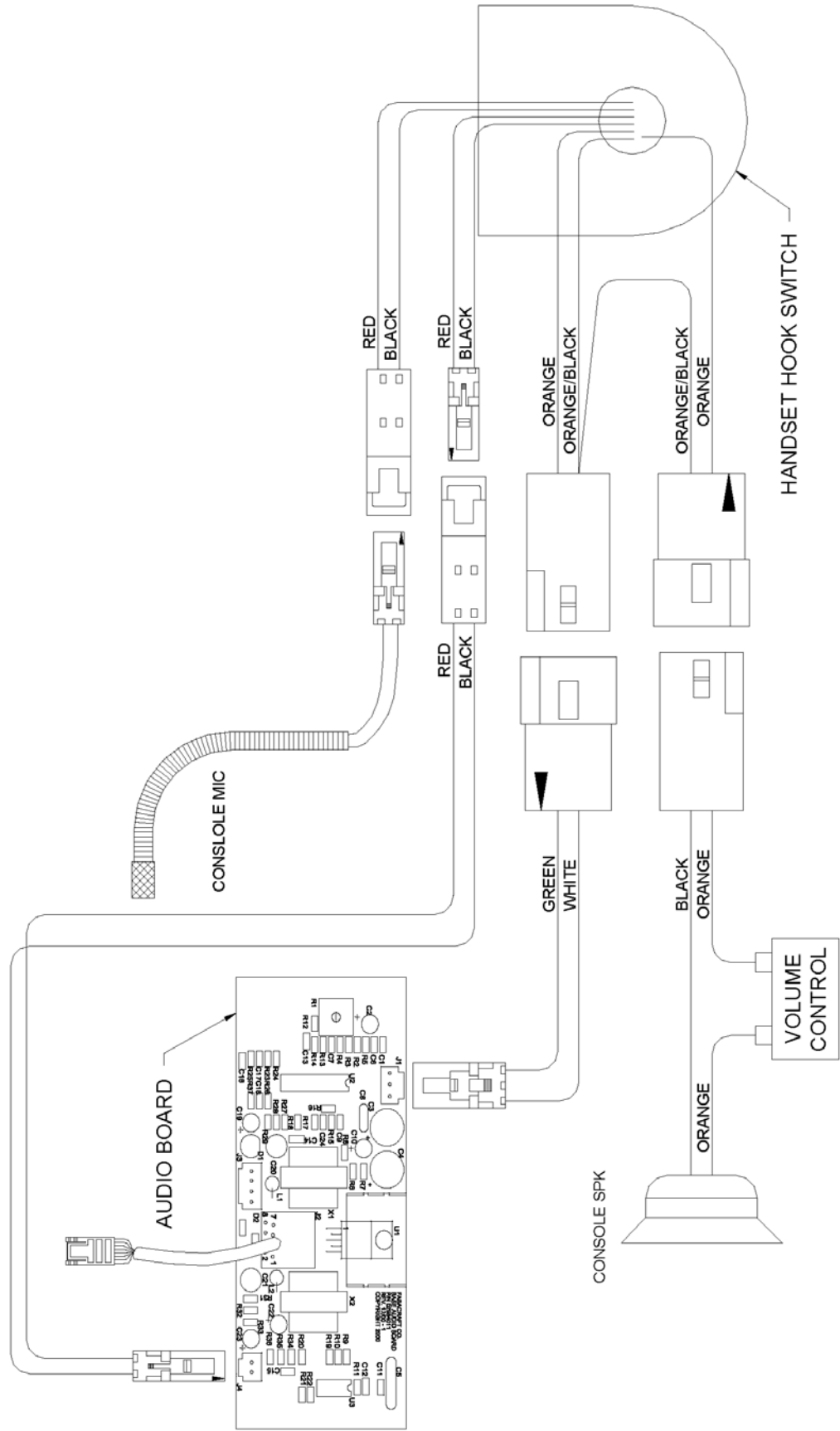


FIG 4.

Troubleshooting

Audio doesn't work

Outlet on?

Transformer plugged in?

Check for 20vac at connector end. No 20vac? Replace transformer.

Still doesn't work? Reseat handset in cradle (if present).

No handset present? 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

