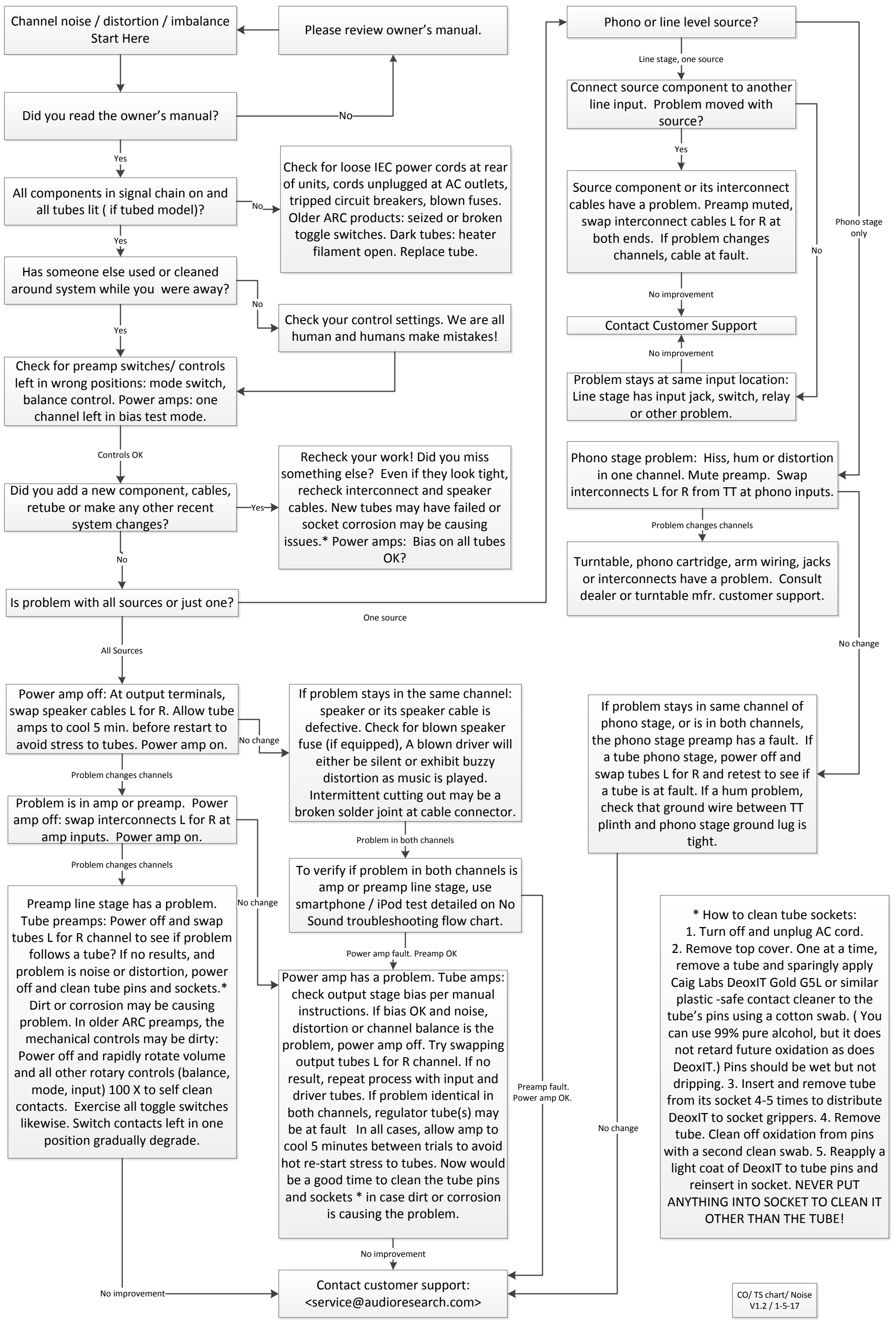
Channel noise / distortion / imbalance Start Here
Please review owner's manual.
Did you read the owner's manual?
No
Yes
All components in signal chain on and all tubes lit (if tubed model)?
No
Check for loose IEC power cords at rear of units, cords unplugged at AC outlets, tripped circuit breakers, blown fuses. Older ARC products: seized or broken toggle switches. Dark tubes: heater filament open. Replace tube.
Yes
Has someone else used or cleaned around system while you were away?
No
Check your control settings. We are all human and humans make mistakes!
Yes
Check for preamp switches/ controls left in wrong positions: mode switch, balance control. Power amps: one channel left in bias test mode.
Controls OK
Did you add a new component, cables, retube or make any other recent system changes?
Yes
Recheck your work! Did you miss something else? Even if they look tight, recheck interconnect and speaker cables. New tubes may have failed or socket corrosion may be causing issues.* Power amps: Bias on all tubes OK?
No
Is problem with all sources or just one?
One source
All Sources
Power amp off: At output terminals, swap speaker cables L for R. Allow tube amps to cool 5 min. before restart to avoid stress to tubes. Power amp on.
No change
If problem stays in the same channel: speaker or its speaker cable is defective. Check for blown speaker fuse (if equipped), A blown driver will either be silent or exhibit buzzy distortion as music is played. Intermittent cutting out may be a broken solder joint at cable connector.
Problem changes channels
Problem is in amp or preamp. Power amp off: swap interconnects L for R at amp inputs. Power amp on.
Problem changes channels
Preamp line stage has a problem. Tube preamps: Power off and swap tubes L for R channel to see if problem follows a tube? If no results, and problem is noise or distortion, power off and clean tube pins and sockets.* Dirt or corrosion may be causing problem. In older ARC preamps, the mechanical controls may be dirty: Power off and rapidly rotate volume and all other rotary controls (balance, mode, input) 100 X to self clean contacts. Exercise all toggle switches likewise. Switch contacts left in one position gradually degrade.
No change
Problem in both channels
To verify if problem in both channels is amp or preamp line stage, use smartphone / iPod test detailed on No Sound troubleshooting flow chart.
Power amp fault. Preamp OK
Power amp has a problem. Tube amps: check output stage bias per manual instructions. If bias OK and noise, distortion or channel balance is the problem, power amp off. Try swapping output tubes L for R channel. If no result, repeat process with input and driver tubes. If problem identical in both channels, regulator tube(s) may be at fault In all cases, allow amp to cool 5 minutes between trials to avoid hot re-start stress to tubes. Now would be a good time to clean the tube pins and sockets * in case dirt or corrosion is causing the problem.
Preamp fault. Power amp OK.
No improvement
No improvement
Contact customer support: <service@audioresearch.com>
Phono or line level source?
Line stage, one source
Connect source component to another line input. Problem moved with source?
Yes
Source component or its interconnect cables have a problem. Preamp muted, swap interconnect cables L for R at both ends. If problem changes channels, cable at fault.
No
Phono stage only
No improvement
Contact Customer Support
No improvement
Problem stays at same input location: Line stage has input jack, switch, relay or other problem.
Phono stage problem: Hiss, hum or distortion in one channel. Mute preamp. Swap interconnects L for R from TT at phono inputs.
Problem changes channels
Turntable, phono cartridge, arm wiring, jacks or interconnects have a problem. Consult dealer or turntable mfr. customer support.
No change
If problem stays in same channel of phono stage, or is in both channels, the phono stage preamp has a fault. If a tube phono stage, power off and swap tubes L for R and retest to see if a tube is at fault. If a hum problem, check that ground wire between TT plinth and phono stage ground lug is tight.
No change
* How to clean tube sockets: 1. Turn off and unplug AC cord. 2. Remove top cover. One at a time, remove a tube and sparingly apply Caig Labs DeoxIT Gold G5L or similar plastic -safe contact cleaner to the tube's pins using a cotton swab. (You can use 99% pure alcohol, but it does not retard future oxidation as does DeoxIT.) Pins should be wet but not dripping. 3. Insert and remove tube from its socket 4-5 times to distribute DeoxIT to socket grippers. 4. Remove tube. Clean off oxidation from pins with a second clean swab. 5. Reapply a light coat of DeoxIT to tube pins and reinsert in socket. NEVER PUT ANYTHING INTO SOCKET TO CLEAN IT OTHER THAN THE TUBE!
CO/ TS chart/ Noise V1.2 / 1-5-17