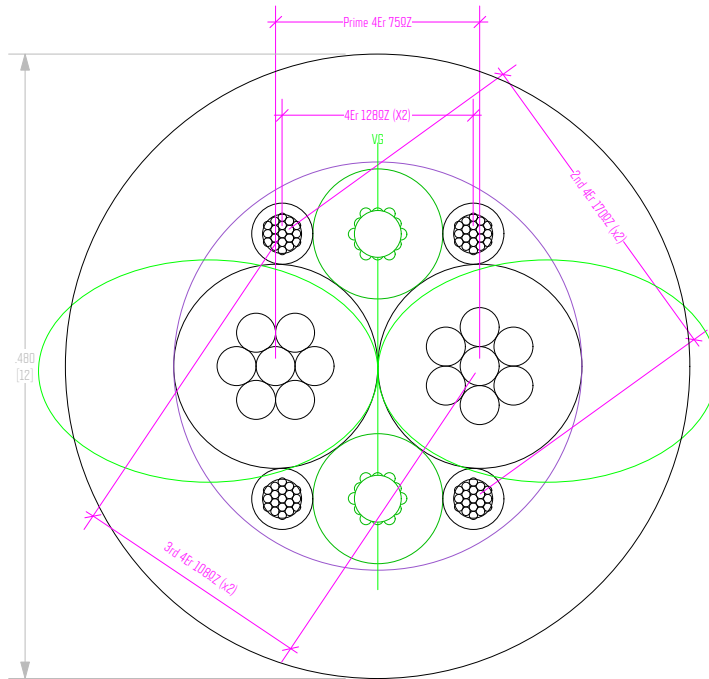


LIBTEC

[Mk.I Rev-A/B]



AD COPY + SPECIFICATIONS

11 | 2015



LIBTEC PHOTOS

ZU AUDIO LIBTEC Mk.I [REV-A & B] LOUDSPEAKER CABLE SPECIFICATIONS + INFORMATION





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[DESIGNED AND MADE BY US]

ZU AUDIO | 3350 S. 1500 W. | OGDEN, UTAH — U.S.A | 800-516-8925





LIBTEC AD COPY/INFORMATION

ZU AUDIO LIBTEC Mk.I [REV-A & B] LOUDSPEAKER CABLE SPECIFICATIONS + INFORMATION

Zu Libtec, despite its humble size, is a high conductance loudspeaker cable designed to compliment all hi-fi and studio loudspeaker/amplifier applications. It excels in match ups as diverse as very low power vacuum tube/very high efficiency loudspeaker pairings as well as ultra power hungry high current combinations. Libtec has a very linear and uniform tone response and will not hide problems in a system, yet will not introduce or reveal unwanted character either. If you like the sound and timbre of your system, but you are looking for increased top to bottom resolution with improved stereophonic recreation and possibly increased dynamics and texture, Libtec is your solution.

INSTILLATION NOTES

Switch your power amp off prior to disconnecting or connecting your loudspeaker cables.

Now, wash your hands with soap prior to handling any cable with bare metal—you don't want to push halides and other subtle tone robbers into the amplifier, cable or loudspeaker connectors. If you do touch the exposed contacts you might want to buff them with a clean cotton rag. Keeping the contacts free of contaminants ensures a long-term and trouble-free connection.

To clean plated connectors, shiny bright gold or silver colored ones, just use rubbing alcohol on a cotton cloth and some cotton swabs to get into the tight parts. If the connector being cleaned is bare copper or silver we recommend cleaning them with our favorite polish, Cape Cod™.

Anytime you are making an electrical connection make it a habit to inspect the contacts and clean them if they are tarnished or dirty. Our bare copper spade lugs may need to be cleaned every year, depending on how clean they are when connected and your environment. Most any copper polish will work for this though we have found Cape Cod™ to be excellent. Brasso™ is also good. Acid based cleaners are tricky, if you don't have experience cleaning copper with acid we wouldn't recommend that you start with your audio gear. Most of the time your terminals are going to be in good condition and just need a little buffing and for that you can use a bit of alcohol and a cotton cloth.

BURN-IN

Libtec will require a good bit of play before it's fully burned in, roughly 400 hours—a healthy use of Teflon® equals slow burn-in. We do not recommend any burn-in devices or special recordings. We do recommend music you enjoy, preferably upbeat full spectrum recordings: rock, roots, full orchestra, big band.... For the possible how and whys about burn-in please see our [Answers](#) section.

LIBTEC MAINTENANCE

No maintenance is required for the cable or the connectors save for the annual copper spade cleaning. If your connector contacts are nice and bright, don't worry about it. However, anytime you are making an electrical connection make it a habit to inspect the contacts and clean them if they are tarnished or dirty.



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LIBTEC HISTORY

Libtec was our second loudspeaker cable to feature our ZuB3™ E&M cable design; the first was Wax which was introduced a year or so prior, back in 2001. Wax was an all copper conductor design and didn't use any exotic insulation materials. With Libtec we wanted to reduce noise and improve bandwidth and linearity of capacitive and inductive reactance which were realized with further revisions to the conductive circuits characteristic impedance as well as dielectrics.

Q: How about the name Libtec, where did that come from?

A: Libtec is a compound of Liberace and technology—a clever way to say you are really good at making stuff with your hands. We love the expression, it resonates with us, still does. Back in those early days our cable machine was primitive, plywood and bent steel, and required more human power and elbow grease than electricity. Liberace technology was not coined by us, we stole it from Mike Olson, founder of Mervin Manufacturing (Lib Tech & Gnu snowboards). Not sure if Mike coined it but it's a great name.

Libtec is Zu's only cable to have been manufactured in all locations: Sean's garage, The Historic Ogden Kiesel Building, the Old Ogden Post Office, Zu Plant N° 1 and now Zu Plant N° 2, both in the Ogden Commercial Industrial Park. In Sean's garage cable was made on our original planetary cable machine that Adam Decaria designed and built from common materials: plywood, aluminum and steel. While this was primitive it could lay down high precision cable, just not all that fast. Current Libtec cable making machine was designed and built by Randy Sandman back in 2006. Randy's machine is a precision, servo controlled planetary machine capable of high precision and high production and likely to remain in service for a very long time (Randy always does it right, and always over builds).

The photo herein is Randy and his newly finished semi-automated planetary machine c. summer 2007.

Manning the machine and production of Libtec cable is nearly exclusively James Read.

Termination and quality assurance has been controlled by *Cable Superstar* Stefanie Casey since 2010—you can thank her for the cables stunning fit and finish and overall build quality.

Libtec has remained essentially unchanged since introduction and has been a very effective tool for us in hooking new customers.



LIBTEC SPECIFICATIONS

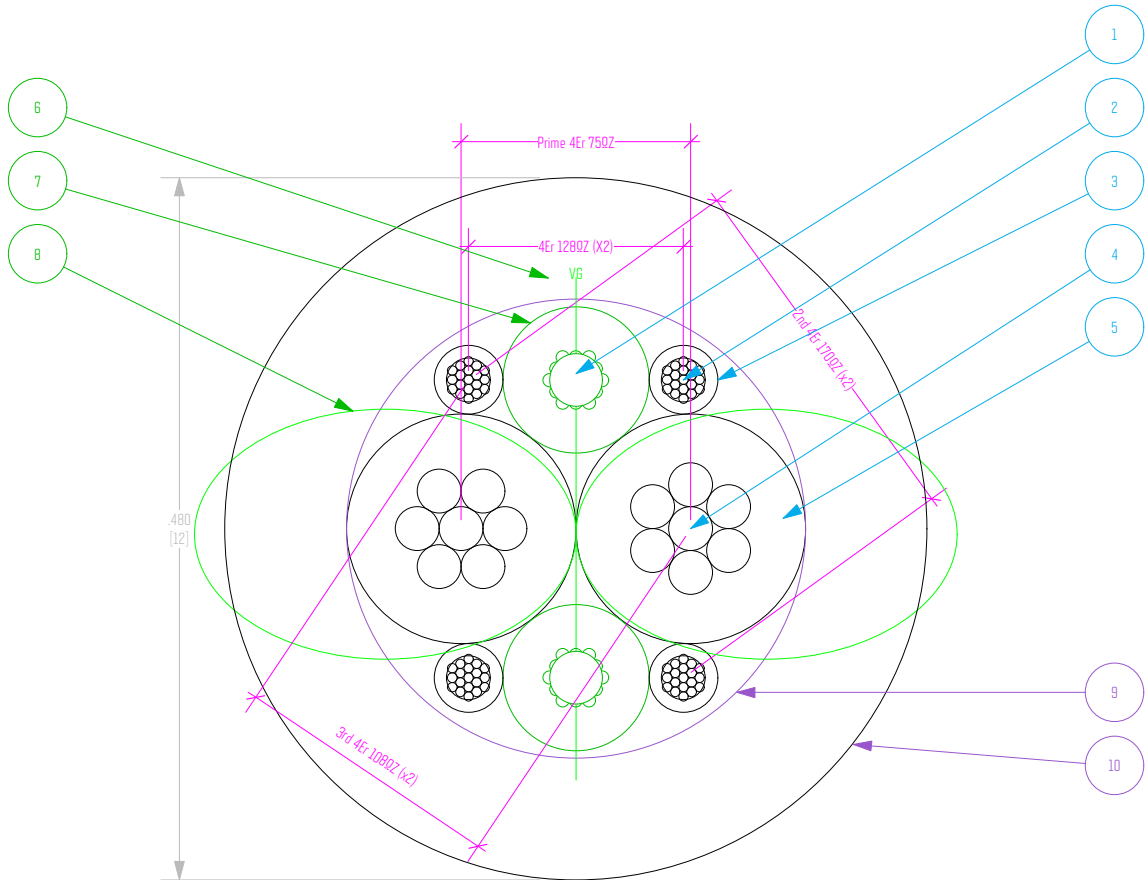
ZU AUDIO LIBTEC Mk.I [REV-A & B] LOUDSPEAKER CABLE SPECIFICATIONS + INFORMATION

Design	Zu Libtec is a high conductance balanced loudspeaker cable designed around ZuB3™ E8M models. Libtec is suitable for all loudspeaker/amplifier applications. Libtec has a very linear and uniform bandwidth and while highly resolving it will not introduce or reveal unwanted character.
Production	2002–current
Device Under Test	Zu Libtec Mk.I [Rev-B] 12' [3.7 m]
Designed By	Zu Audio
Cable Mfg By	Zu Audio
Termination By	Zu Audio
Manufacturers Country Of Origin	U.S.A.
Signal Conductor Metallurgy [+]	pure copper & silver
Signal Conductor Metallurgy [-]	pure copper & silver
Cable Geometry	ZuB3™
Wire Geometry	primary: 6/1 perfect lay secondaries: low strand count equal lay
Directional Shielding	yes, install so markings reads in the direction of flow, amp > speaker geometric
Conducting Area [+]	≈ 11 AWG [4.1 mm ²]
Conducting Area [-]	≈ 11 AWG [4.1 mm ²]
Dielectric	PE/PTFE/air/Cu/PET/carbon
Cable Sheath	Fine yarn Dacron braid
Leadout Sheath	Dacron monofilament braid
Rs [+]	0.04 Ω
Rs [-]	0.04 Ω
Cp	500 pF
Ls [loop]	2500 pH
Bend Radius	1-1/2" [38 mm]
Cable Diameter	31/64" [12.2 mm]
Red/Black Leadout Length	8" [20 cm]
Tolerance	0.1%
RoHS	compliant
Life Expectancy	100 years+
Warranty & Service	limited lifetime, does not cover misuse or abuse



LIBTEC SPECIFICATIONS

ZU AUDIO LIBTEC Mk.I [REV-A & B] LOUDSPEAKER CABLE SPECIFICATIONS + INFORMATION



1. Diamagnetic/dielectric/ground node [x2]
2. Signal/power conductor, heavy silver plated copper equal lay [x4]
3. Teflon® PTFE insulator 600V [x4]
4. Signal/power conductor, copper 6/1 [x2]
5. PE insulator and spacer
6. Primary virtual ground plane
7. PVC spacer
8. Secondary virtual ground plane complex
9. 90%+ B&E field containment/dielectric perimeter
10. Outside diameter of cable sheath



LIBTEC WARRANTY

ZU AUDIO LIBTEC Mk.I [REV-A & B] LOUDSPEAKER CABLE SPECIFICATIONS + INFORMATION

WARRANTY

Zu products are designed and manufactured to the highest quality. However, if something does go wrong Zu will fix or replace the product free of charge. Zu Libtec loudspeaker cables have a limited lifetime warranty applicable to the original owner. If under normal home use you have any problems with this cable we will fix or replace the product.

While every effort is made to ensure a perfect finish that will last a lifetime, this warranty does not cover damage from impact, abrasion or UV exposure. Zu products are designed to be used in temperature and humidity controlled environments, namely your home, studio or office unless otherwise stated.

If in the highly unlikely event that a Zu product arrives to you dead on arrival (D.O.A.), and after discussing it with a Zu tech, we will ship another of the same product at our expense and arrange for the D.O.A. product to be collected. If after inspection we find that you have misrepresented a returned product's condition, and that it was improperly handled or used, Zu will charge you for all damaged parts, labor, shipping and handling of the product.

Warranty does not apply to damage caused by operating the product outside the intended use, accident, damage caused by another product, misuse, abuse, flood, fire, earthquake or any other external causes. Warranty does not cover damage caused by modification or service performed by anyone other than a Zu representative.

When a product or part is exchanged the replacement becomes your property and the suspect or damaged part becomes Zu's property.

WHAT YOU CAN EXPECT IF WARRANTY SERVICE IS NEEDED

If warranty becomes necessary, you must call or e-mail for a return of material authorization (R.M.A.) number. This provides opportunity to assist in diagnosing the problem and helps us to schedule for rapid turnaround in the event that parts, service or repair is needed. Upon factory inspection of parts or product, warranty eligibility will be determined. While service options, parts availability and response times will vary, we do our best to keep you happy. International customers should know that Zu will comply with all applicable export/import laws and regulations, you may be responsible for custom duties, taxes, broker fees, freight, and other charges. When shipping of product or part is required, repackage the complete product, or part, in its original packaging. If you have any questions about packaging please call or e-mail. Product damage caused from incorrect repackaging is not eligible for refund or warranty and the freight company may also reject your insurance claim. Until we have the product back in the shop and sign-off that it is eligible, the product is still your property, we recommend you insure or declare the full value when shipping. We also recommend that you only ship with a freight company that has a good reputation and offers tracking and insurance for the full amount.



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