

INTERCONNECTS - CONTROLLED & EXTENDED BANDWIDTH

If you could improve the sound of your audio system, what would that be?

Expansive soundstage? High-frequency detail? Less glare? Warmth & richness?

TARA Labs cables are the perfect match for any audio system, regardless of the combination or complexity of the components you have. If your “sound” needs more detail, more air, expansive soundstage, or if you feel there is too much high-frequency glare, or your sound lacks warmth? Our new Controlled Bandwidth and Extended Bandwidth cables will not only upgrade your sound, but will also enable you to have the perfect relationship between component and cable.

**Scroll down for further details on our Controlled Bandwidth and Extended Bandwidth interconnect cables*

Extended Bandwidth & Controlled Bandwidth Information

TARA Labs is known as one of the worlds' leading manufacturer of high-end audio cables. Currently the business model employed by the company has been one of both technological innovation and design. This ideology has enabled TARA Labs to remain at the cutting edge of the high-end audio industry. With an eye towards continual manufacturing advancements being made in audio components such as speakers and amplifiers, TARA Labs continues to lead the industry in developing new cutting-edge technologies. Our latest research and development has enabled us to create new reference grade audio cables that work extremely well with many of the newly developed materials used in speakers such as Beryllium, Titanium, Kevlar, and Ceramics in addition to standards such as carbon-fiber, fabrics, polypropylene, paper, etc.

TARA Labs are categorized into two lines: Controlled Bandwidth and Extended Bandwidth. These two categories offer a wide range of reference-grade cables that will enable the audiophile to accommodate and upgrade the majority of the high-end audio components available today.

Extended Bandwidth

What this means is that the cable design employs a cable construction that takes advantage of the electrical characteristics such as Capacitance and Inductance. For example, we can reduce the Inductance in a simple conductor by changing its size, and in the case of a Rectangular Solid Core(R) the shape of the conductor can reduce the Inductance in the conductor. By reducing

the Capacitance value in an Interconnect cable, we can extend the high frequency detail. These factors, including reducing the dielectric construction in a cable will make the cable sound more open and neutral.

The Extended Bandwidth Series of cables is recommended for most audio systems. A very good example of the EX cable design philosophy is the Air Series of cables from TARA Labs. In most systems, the Extended Bandwidth cables deliver a sound that is more revealing, open, neutral and transparent.

Most audio electronics use filtering and do not amplify extremely high frequencies such as RF/EMI. The best loud-speaker systems are generally phase coherent and do not sound forward or overly harsh, or even bright. However there are some combinations of audio electronics and loudspeakers that create strain or glare in the sound.

Extended Bandwidth – w/HFX Floating Ground Station

The HFX Floating Ground Station is an extraordinary component that is included with all reference Extended bandwidth interconnect cables. TARA Labs proprietary ground station is made of mil-spec aluminum alloy. Our specific metallurgical properties allow for the reduction of RF and electromechanical resonance; EMI/RFI. It's 18.23% heavier and stronger than aircraft-grade stock. Equipped within the HFX station is a patented ceramic composite of metallic oxides and an amalgam of mineral elements in a ceramic binder called "Ceralex." Because the HFX functions completely outside of the signal path, its ability to dissipate and eliminate the effects of EMI/ RFI (Electromagnetic interference & Radio frequency interference) which also includes sonic distortion, noise, "snow", and lack of image clarity. The appearance of the HFX station is one of beauty and elegance, in addition to its superb performance.

Controlled Bandwidth

The ISM OnBoard Series of cables employs the Controlled Bandwidth technology from TARA Labs. The ISM OnBoard Series presents a range of cables with more presence, mid-range warmth and richness without sacrificing detail and high frequency extension.

A common misconception is that the words warmer and richer may indicate a sound with smearing or coloration of the upper bass through mid-range frequencies. This is not the case with any of TARA Labs' cables. The sort of smooth or rolled-off sound is found most often with cables that employ filtering such as inductors and resistors found in network filter box designs. By contrast, the sonic signature of a TARA Labs cable is one that is more coherent and natural. The sound is often described as being lifelike with bloom and body.

The ISM OnBoard Series of cables is especially recommended for systems that have wide-bandwidth electronics (with limited filtering*), or with systems that use loudspeakers that have a tonal balance that emphasizes the high frequencies. In general the ISM OnBoard Series (Controlled Bandwidth) is recommended for systems that are slightly etched sounding or overly detailed, perhaps with a sense of glare.

*Higher frequencies in the RF bandwidth, or Electromagnetic Interference (EMI) can be picked up easily by longer lengths of interconnect cables, especially those with low Capacitance. Connecting this type of cable (especially single-ended) between high-powered solid state amplification can sometimes be a problem with components having limited filtering.

Controlled Bandwidth – Onboard Capsule

The ISM OnBoard concept is unlike traditional shielding methods or filter networks. Even complex shielding methods still remain in proximity to the conductors, thereby distorting the audio signal. Filter networks in boxes at the ends of the cables often contain low quality resistors, inductors and capacitors to perform the filtering. These reduce RFI/EMI in the cable itself by being soldered in series and parallel between the signal conductors. This alters the integrity of the signal, in particular, the higher order harmonic structure of the music.

In the ISM OnBoard system, RFI/EMI is dissipated and absorbed within the OnBoard capsule. This function occurs in isolation from the signal conductors.

The signal path is not cut and fitted with additional components. The OnBoard capsule is effective in eliminating the noise of RFI/EMI without the attendant high-frequency anomalies of filter networks.

Speaker Cables - Extreme Audio Systems and Extreme performance cables with low inductance.

At TARA Labs, the major design goal for our speaker cables is to continually evaluate and re-evaluate both our design and technology in order to not only keep up with the current trends of new product introductions, but to try and improve the performance of our products that are being used with audio components of yester-year. And as with an ever increasing introduction of new components into the marketplace, we have found over and over again that not every cable or component have that perfect symbiotic relationship with each other.

As the loudspeaker cables carry much higher signal voltage and current into a non-linear impedance (the loudspeaker) the reactive load of the loudspeaker can be difficult for some

amplifiers to drive... and the all-important damping factor of the amplifier does change from amplifier to amplifier.

The phenomenon is readily apparent, heard as bass that is soft and low in amplitude, sometimes together with high frequencies that are too smooth or rolled-off, in addition to a loss of musicality.

However, when these amplifiers are connected with TARA Labs 'SP' speaker cable models, the output of some high-end loudspeakers instantly becomes audibly improved at variable frequencies.

One of the great attributes of the TARA Labs 'SP' speaker cable models, are the 'state-of-the-art' technology and design that was created by TARA Labs. Their performance level is absolutely spectacular when matched with the majority of high-end audio components available today.

TARA Labs 'SP' cable models are now available in the Evolution series cables; Air Forte, Air Evolution, Omega Evolution and the Grand Master Evolution.