1. What is Quantum Acoustics?
   a. Quantum Acoustics is a subset of quantum physics. It is the rules of quantum mechanics applied to acoustics (the movement of energy in air). Where quantum behavior was originally thought to apply only to subatomic particles, it is now believed to also exist in the larger realm of atomic and even molecular sized particles. Essentially, an air molecule can be in two places at once. ZR Acoustics controls air at the molecular level thereby controlling all elements of sound such as frequency response, amplitude, timbre, phase and resonances.

2. How many types of products are there? We have 9 types of products
   See product comparison | weblink here.
   ● There are 4 Families of ZR Products
     1. ZR Nomad
        a. Turnkey ZR Studio in a Shipping Container.
     2. ZR Prefab
        a. Reusable ZR Custom Designed Studio
     3. ZR Micro
        a. SMD (surface mounted device)
        b. Original ZR nanotechnology
        c. 2’ x 2’ x 1 – ¼”
        d. 10 Acoustic Designs
     4. ZR Sample Rate
        a. SMD
        b. Acoustical Art quantum nanotechnology
        c. ~20” x ~ 40” x ¾”
        d. 9 Acoustic Designs
        e. Commonly Referred to as SR’s

3. What is a SMD?
   a. SMD stands for “Surface Mounted Device”. It is an acronym used in electronic chip technology that we have adopted to describe all wall mounted ZR Acoustics Products as they both originate in quantum mechanics and exhibit high performance in a very thin package with complex internal designs. This includes the ZR Micro and ZR Sample Rate family of products.

4. What is a CDL?
   a. CDL stands for “Custom Design Layout”. As SMD’s are very accurate by design they require a specifically designed layout of what products in which design to achieve the iconic ZR Acoustic experience.

5. Do ZR SMD Packages have CDL’s?
a. Yes, all SMD packages include a complimentary Custom Design Layout. The packages are designed for any standard room. For clients with unusual acoustic challenges we recommend a CDL specific to your space and budget.

6. What budget range are ZR SMD's effective in?
   a. $1400 and up. Minimally we recommend at least two SMD's to start with. As the ZR effect is scalable, more surface area coverage equals more effect.

7. Can I buy a variety of products or just packages?
   a. Either. For best results we recommend using an SMD Package with a complimentary CDL. Alternatively we recommend a CDL tailored to your space and specific usage. That being said, you may purchase as many SMDs as you like in whatever quantity you like.

8. Can I modify a ZR Package?
   a. It is not recommended. The packages have been designed for maximum performance using highly accurate SMD's with a variety of designs. Any incorrectly applied SMD's can potentially have a negative acoustical impact.

9. Will only 2 SMD's be effective in my room?
   a. Absolutely. All of our products are scalable, therefore the effect you have with two is the same as with 200, but only in a smaller area with less effect. Consequently, the associated sweet spot is also relative and sized to the amount of surface area covered: More SMDs = larger sweet spot (wider, deeper, and taller)

10. How do I order my fabric?
    a. Once an order is received, the fabric is ordered as part of the manufacturing process. However, to expedite the process, DHDI can send up to ten textile samples for review from our cloth brochure before an order is placed.
    b. Typical process for choosing fabrics is as follows:
       1. Review cloth brochure
       2. Choose up to 10 samples
       3. After reviewing samples, finalize textile choice
       4. Once order is placed, textile order is processed with the product order
       5. Product arrives at clients location wrapped in the selected textile

11. Which acoustical fabric is used in the Lynda.com interview?
    a. Kimono Temari

12. Can I stain/paint Sample Rate family products?
    a. We do not recommend treating the sample rate family of products with anything as it changes the porosity of the material, and therefore lowers the overall performance of the product.

13. How can I purchase ZR products?
14. How long does it take to receive my order?
   a. 4 – 6 weeks if in stock.
   b. 5 – 12 weeks otherwise.

15. How do you ship?
   a. Products are currently all shipped on pallets via freight.
      - From experience, we find shipping on pallets results in lower damages and higher on time deliveries.
   b. ZR Micro sampler and ZR SR+ Sampler packages which can be shipped via Fedex or UPS.

16. Do you ship internationally?
   a. Yes. We ship anywhere worldwide.
   b. International Shipments require standard Customs and Duty brokerages.

17. Do you do custom graphics?
   a. Absolutely. Selected images from the Shawn Frederick Fine Art portfolio are available printed on custom acoustic cloth for an up charge (http://www.frederickphoto.com/)
      In addition; personal imagery can be printed onto the same custom acoustic cloth, as long as the resolution of the provided image is 600 dpi.
      Please contact us directly for a quote at info@deltahdesign or (310) 581-2331

18. How heavy are the products?
   a. The weights of the products range from 2 to 23 pounds. Please see the product comparison sheet for a complete list of weights per product.

19. Where can I experience ZR Acoustics in person?
   a. Marina del Rey, Hollywood, and Studio City in Los Angeles/Hollywood area. Outside the greater LA area please contact us directly to set up a listening demo.

20. How are panels fastened to walls and ceilings?
   a. Panels are fastened in three different fashions:
      - Z-Clips
        1. Micro
        2. SR
      - Direct fastening through the product to the wall
1. SR8
2. SR12
3. SR24
   - Ceiling mounting plates.
     1. Micro
     2. SR8 +
   - Tracks or Grommets
     1. ZR Screen

21. Do you design custom panels?
    a. Every one of our products is a custom designed, acoustically specific, surface-mounted device. Each product has anywhere from 3-10 custom designs. The combination of duration using our entire product line allows for any size any shape room to be rendered aurally undetectable.
    b. In the event that your situation requires a custom solution, please contact us directly to discuss a tailored acoustical consultation for your needs.

22. What is inside the panels?
    a. Ubiquitous, every day, materials intentionally designed with extreme acoustic resolution

23. Why are ZR Quantum Acoustics products so expensive?
    a. Actually, they’re not. Currently, ZR SMDs derived from ZR custom studio designs, such as universal mastering in Hollywood, are the only transportable, attached-to-the-wall, acoustical product that can achieve lifelike aural imaging and wall-to-wall sweet spots. ZR is a one of a kind unique technology that does not require room equalization, bass traps, or electronics of any kind. Comparing ZR to traditional acoustics is akin to comparing apples to oranges, or more appropriately, spaceships to bicycles. Mathematically, ZR SMDs are at least 14,000 times the acoustic resolution of traditional designs and products. In short, SMDs provide over 14,000 the performance vs. traditional products for a minor increase in cost.

24. What do SMDs do?
    a. SMD’s are miniaturized versions of our full construction ZR Studios and exhibit the same ZR iconic characteristics as they do including: Lifelike Aural Imaging, wall-to-wall sweet spots and natural organic frequency response. To control all sound, ZR controls the air molecules on which the sounds waves ride. The result is extremely effective, extremely thin SMD’s with broadband effects resulting in dramatic aural imaging and performance.

25. Do ZR products work in conjunction with other additional acoustic products?
    a. Absolutely. We recommend (best case scenario) replacing your acoustic products with ZR products. However ZR products will work flawlessly with other acoustical products and still produce the iconic ZR characteristics.

26. Why ZR Products behind the speakers?
a. In order to get the best clarity, the least amount of phasing issues, and the maximum square footage in any space, we recommend ZR SMDs on the front wall with your speakers directly up against them. This forces the first reflection to be the front wall and allows us to quantize the air between the speaker and the front wall, therefore removing all phasing issues in secondary, tertiary and quaternary issues downstream.

27. What are the differences between the packages?
   a. The effects of ZR Acoustics are scalable to the amount of surface area covered. More coverage equals better performance. Therefore, the packages start with minimal surface coverage and as the model numbers increase, so does the surface area coverage. Packages are the best value as they all include a complimentary CDL (Custom Design Layout).

28. Is it possible to buy a package and then add onto it later?
   a. Absolutely. The intention behind packages is a value-based entry to achieve mastering quality acoustics for a fraction of the price of building a traditional studio. This means you can add on to any package and increase the performance of your room as your situation changes. As all SMD’s are easily moveable, existing packages can also be utilized into larger CDL’s or larger SMD packages for greater effect.

29. What does an SMD package include?
   a. Each package includes a variety of product (see ZR SMD packages), associated Zclips and ceiling mounting plates (if needed), and a complimentary CDL.

30. Do you have acoustical test data on the products?
   a. Absolutely. The data we have requires an expensive software package to view and is an overwhelming amount of data. We are currently working with the testing software to find a way to present the data in an easily understandable and viewable format.