

## Teaching Topics by Track

### **Track 1.....Microphones** *(length: 46:50)*

Covers microphones types and related terminology, the construction of dynamic, ribbon and condenser mics, how a simple lack of knowledge can cause a person to misuse a mic, the Five Classic Microphone Polar Patterns, how to use the 3:1 Rule, how to approach miking a choir and other voices or instruments.

### **Track 2.....Mic Placement Techniques** *(length: 58:29)*

Continues the discussion of microphones by illustrating various microphone techniques. The student will hear an acoustic guitar miked with several different approaches, and then a grand piano also miked from several different approaches.

### **Track 3.....How to Hook Up Your Sound System** *(length: 60:38)*

Covers the various types of cables and connectors that are typically used in audio. Proper construction of cables is illustrated, how to solve hum and buzz problems, and when to use balanced, unbalanced, low impedance and high impedance cables is discussed.

### **Track 4.....Maximizing Your Console (Signal Flow Logic)** *(length: 60:53)*

Understanding signal flow logic is the key to operating a sound console with confidence. This tape discusses signal flow at length, as well as establishing proper gain structure.

### **Track 5.....Relationships & Burnout** *(length: 10:00)*

This Session started as we returned from a lunch break, and it turned out to be an appropriate time to approach the important subject of Relationships & Burnout.

### **Track 6.....Equalization** *(length: 17:16)*

Illustrates the differences between shelving EQ, bandpass EQ, graphic and parametric EQ, and discusses the typical uses of each type.

### **Track 7.....Signal Processing** *(length: 19:54)*

This section discusses compressors, limiters, gates and expanders - what they do and when to use them. Then we move to the tasteful use of effects processors like reverb and echo, and time modulation effects like flanging and chorusing.

### **Track 8.....Putting Together a Great Mix** *(length: 26:55)*

Armed with the technical fundamentals, we can now apply that knowledge and explore the art of putting together a great mix. You may discover that your "ears" are better than you think they are.

### **Track 9.....Loudspeakers** *(length: 69:55)*

Not everyone is interested in the art and science of sound system design, so this section is considered a Bonus Study Section. The first portion is relevant to anyone, though, because it discusses stage monitors as well as the main "house" loudspeakers. Several comparisons are made between properly and improperly clustered loudspeakers, and then the discussion explores acoustical modeling with EASE, and other related issues.

## Workshop Concepts & Agenda

The study program you hold in your hands is your key to unlocking technical excellence in your ministry! I can't emphasize that enough. Your careful presentation of this material to your sound team volunteers will help you literally change their lives! Your technical support ministry will never be the same after your team studies this program together and puts these techniques and concepts into action!

I've conducted twelve versions of my Soundcheck Workshop program since I first introduced this concept in 1987. As I perfected the process, each successive program became even more powerful than its predecessors as I improved not only the content of the seminar but also the manner in which I presented the information.

If there's one thing I've learned in teaching literally thousands of church music pastors, technical staff and support team volunteers, it's to keep the material and the presentation simple. There are a lot of things we could talk about, but unless your team is equipped with a thorough understanding of the basic principles found in this program, they'll never be able to fully understand more complex issues or concepts.

I think you'll find that this question and answer format is very effective at helping your students learn quickly. The idea is to present "golden nuggets" of information rather than confuse them with tons of detail they don't yet need and wouldn't understand. Instead I've boiled it down to the basic set of principles that every student of church sound reinforcement needs to know!

The advantages to your students are that their hands won't be hurting from furious note taking, and they won't get distracted by trying to write down a comment while you're presenting the next point. Don't get me wrong – they should be furiously taking notes. But at least they won't have to write down each question; all they'll need to do is fill in the blank and jot down your supportive comments.

Later on, the points I make in this guide will provide an outline for them to refer back to as they study on their own. And anytime they have a question they can refer to the accompanying tracks, recorded at a live workshop, to help them fill in any points that they missed during your presentation.

The basic format of the workshop is simple yet powerful. I'd like you to take particular notice of the Strategies page that follows each study section. This is where you'll find the real power of this study program. These pages challenge your students to take the information off the page and apply it to your specific situation! This will help you rally your team around specific problem areas in your ministry. If your ministry has stagnated over time, these Strategies sections will definitely get your team off the fence!

An effective way to launch your seminar would be to sit your students down and let them watch a good video overview. With that in place, they will excitedly receive a more detailed study of each subject. We recommend the DVD called Live Audio Basics by Ron Davis. You can order Ron's DVD on our CSC Store, or from Ron's website at <http://www.down2earthaudio.com>.

### **A Suggested Schedule**

Using this program, you'll be able to present a tremendous amount of information in a very short amount of time! If the need to train your sound team is urgent, you could even bring them up to speed over a single weekend. Just schedule the workshop based on the same format that I used – a Friday evening and all day Saturday.

In fact, the workshop agenda that you'll find on page three of the workbook shows the material broken up into four sessions. In my Friday / Saturday format, Session One was held from 7:00 pm to

10:00 pm on a Friday evening. That gave us time to get to know one another a little better, and allowed me time to lay out the plan of attack.

Session Two was held from 9:00 am to 12:45 pm on Saturday. We broke at that point for lunch, and in an effort to encourage people to build relationships I called it the “Take A New Friend To Lunch” Break.

Session Three started at 1:30 pm and picked up where we left off from the morning session. The day ended at 4:30 pm with an invitation to spend the next hour or so taking turns mixing a multitrack recording that I had prepared for that purpose.

I've called Session Four a Bonus Study Section because some individuals may not be interested in going to that depth, and that's okay. I think it will help everyone, but you'll need to be the judge in your own situation. In our case, we took a short dinner break, started the evening session at 6:00 pm and ended up around 9:30 pm. That made for a very long day, and my voice was toast by the end of it, but we had a great time. I expect you and your team would too if that's the approach you'd like to take.

One special note before we move on: If you choose this weekend class format, ask your Church to pay for the lunch. It doesn't matter if it's catered, brought in from a favorite restaurant, or prepared by folks in the church. Don't look at it like you're doing this great thing for your students by providing this class for them. Your team is also making a major investment of their time specifically for improving the technical excellence at your Church, and for your Church's leadership to honor that investment by simply paying for a great-tasting, memorable lunch would be a wise gesture on their part.

You can deliver an effective workshop in a single weekend, and if that's all the time your team can afford to invest right now, or if your need for training is especially urgent, then by all means go for it.

However, I would encourage you to invest more time than that. Shorter seminars spread over a longer time will have a more lasting impact on your team. One format that has worked well for me in the past is a two or three hour class held, for example, each Monday night for ten weeks. Shorter classes spread over a longer time span will help your team absorb the information better. That also gives you an opportunity to reinforce the previous week's lesson before you move on to the next subject.

This short class format will also help the individuals in your ministry build lasting relationships over a period of time, and those relationships will help you build a “team” instead of “a-bunch-of-guys-whokinda-like-to-get-together-and-do-this-stuff-sometimes.” With just a little planning, I think you'll easily discover a way to build a schedule that your team can work with. Here's one suggestion.

### **An Eight Week Workshop Schedule**

- Week 1    Microphones & Mic Technique
- Week 2    How to Hook Up Your Sound System
- Week 3    Maximizing Your Console
- Week 4    Equalization & Signal Processing
- Week 5    How to Build a Great Mix
- Week 6    Hands On Mixing Session
- Week 7    Loudspeaker Usage
- Week 8    The Only Stuff That Matters (Relationships)

All the cool technical stuff on the planet isn't worth a thing if your team is fighting with each other, holding grudges against folks in the worship team, or worse yet – if your team is at odds with the pastoral staff and won't submit to their authority over the ministry. Burnout is a reality in technical support ministries, and you as their leader should address these issues clearly. We did spend a portion of our time during the workshop talking about this issue. You will find that conversation on Track 5.

### **How to Use the Recordings & PowerPoint**

The audio recordings from my live workshop are there to help you make your seminars as powerful and effective as possible. They will help you prepare to teach your volunteers, they will provide a backup system of instruction in case any of your team has to miss one of your classes, and they will provide your team with additional materials for their own review after your seminar has been completed.

Probably the most effective approach for using these tracks would be for you to make copies of the files for each of your volunteers who will be attending your seminar. Prior to your first seminar together send each one of your volunteers home with a jump drive along with instructions on which track to listen to in preparation for each of your seminars. Then each of your presentations would consist of reviewing the assigned materials for the week, discussing that material in greater depth, applying that information to your specific situation and equipment, and answering any questions that come up.

For example, if the subject for next week is microphones, you would assign your students to listen to the first track on microphone technique. When they come to your class about microphones you would cover the questions on pages four through seven of the workbook, answer any of their questions that came out of their homework assignment, discuss the specific mics that they will get to work with at your church, and illustrate the mic technique that you're using and discuss why you've chosen to do it that way. It would also be a good time to experiment with other possible microphone choices or placement techniques.

Another way to use the program would be for you to assign your students to listen to the specific section of track needed for the next class – in this case the one on microphones – and to also answer the questions on pages four through seven while they listen to the tracks. Then when you come back together for your seminar a lot of that basic groundwork will have already been established, and you can use your time together more effectively to relate that knowledge to the specific equipment you have to work with.

You know your team, and my guess is that by now you already know which solution would be best for them and best fit their personalities.

### **Some Closing Thoughts**

Ninety percent of the key to a successful tech support ministry is attitude. A successful ministry is built with people that have a willing heart. I can't teach that – that's between them and God. But I'm very good at teaching people about complex technical issues. With this program, you can be too!.