

Sound Operator's Handbook

Tricks of the Trade

by

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Introduction

Over the past 20+ years, I have helped hundreds of churches with their Sound and Video. I have seen many common problems which can be easily solved with a little knowledge and experience. This book is an attempt to pass on this information effectively. I believe it will help sound operators accomplish their job with greater success and less frustration.

The book covers the four major problem areas of sound. These are Miking, Mixing, Monitoring and Feedback. In all these topics, many tips are revealed which will help you achieve the level of excellence you desire. A chapter also explains the function of all the controls on your mixer.

Chapter 1 explains the different types of microphones and which ones are best for various applications. It gives miking techniques for speech, vocal and instruments. This includes pick-up patterns, working with proximity effect, obtaining consistent natural sound, and other topics. Examples are shown for effective miking of people and many common musical instruments. Techniques are explained for miking virtually all instruments. Direct connection of electronic instruments is also explained.

Chapter 2 is dedicated to Feedback. This is often a significant problem, especially in churches. Here you will learn exactly what feedback is, the factors which contribute to it, and how to eliminate it. We have already covered microphone techniques in Chapter 1. Using the right microphones properly goes a long way to reducing feedback, but room equalization, speaker characteristics and placement and number of open microphones are some of the other factors which need to be considered.

Chapter 3 explains the function of all the controls on your mixer. Three different mixer examples are used which cover just about all the mixers available. One of them will be very similar to yours. If you already know what every dial and button on your mixer does, you can skip this chapter. Otherwise, you will probably find it very helpful.

Chapter 4 talks about mixing. Once you have learned how to use the microphones, you need to mix the sound properly. If you only have one or two speech microphones, this is quite simple. If you have several vocals and instruments however, it can be quite complex. The Mixing section of the book teaches you how to achieve that delicate blend of sound in which all instruments and vocals can be heard in their proper balance. You will learn how to mix the sound properly, using channel EQ's and Pan to get the proper "Studio" sound. Other topics such as Effects Processors are also discussed.

Chapter 5 covers what is sometimes the most frustrating aspect, Monitoring. Getting the right level and mix which will make all the singers and musicians happy while keeping the levels low enough so they don't interfere with the "House" or main sound can be a daunting task. The information in this book will make this seemingly impossible job achievable. Not only do we discuss techniques, but we also talk about various technologies including multiple mixes, personal mixes and in-ear monitor.