TABLE OF CONTENTS

FOREWORD

| SECTION 1 \ CONCEPTS |
|--|
| CHAPTER 1: MINDSET - A CONSIDERED APPROACH |
| Level Variance & Spectral Variance |
| SECTION 2 \ MECHANICS |

WAVELENGTH AND DIRECTIVITY

CHAPTER 4: FREQUENCY.

| CHAPTER 5: TIME, PHASE AND SUMMATION |
|---|
| Effects of Level Offset |
| CHAPTER 6: OVERLAP |
| SECTION 3 \ DESIGN |
| CHAPTER 8: THE SLIDING SCALE OF VARIANCE 47 |
| Range Ratio |
| The Sliding Scale of Variance |
| CHAPTER 9: DESIGN CONSIDERATIONS AND WORKFLOW 55 |
| Point Source Aiming Considerations |
| Line Array Aiming Considerations |
| Subwoofers |
| Fills and Delays |
| CHAPTER 10: FRIENDS IN LOW PLACES (CARDIOID SUB- |
| WOOFER STRATEGIES) |
| Endfire |
| Gradient In-Line |
| Gradient Stack |
| |
| SECTION 4 \ PERSPECTIVE |
| CHAPTER 11: THE MAGNITUDE FALLACY: PRIORITIES, TRADEOFFS AND FREE LUNCHES |

| Number of Affected Listeners | |
|--|--|
| Main-Sub Alignment | |
| Aux-Fed Subs | |
| CHAPTER 12: MUCH ADO ABOUT MICROPHONES88 | |
| Microphone Correction Files | |
| Matched Microphones | |
| Are All Mics Created Equal? | |
| CHAPTER 13: SPLAY AND PRAY94 | |
| 0° Splay Angles | |
| "That's not an array. THIS is an array!" | |
| CHAPTER 14: THE CONFUSION ABOUT TILT101 | |
| Uniformity is not Tonality | |
| | |
| | |
| SECTION 5 \ ALIGNMENT | |
| , | |
| CHAPTER 15: PROCESSING AND DRIVE | |
| CHAPTER 15: PROCESSING AND DRIVE 109 Processing Granularity | |
| CHAPTER 15: PROCESSING AND DRIVE 109 Processing Granularity | |
| CHAPTER 15: PROCESSING AND DRIVE 109 Processing Granularity | |
| CHAPTER 15: PROCESSING AND DRIVE 109 Processing Granularity | |
| Processing Granularity | |
| CHAPTER 15: PROCESSING AND DRIVE 109 Processing Granularity. .110 Processing Structure .111 Three-Hered Processing Approach .113 Signal Generator Routing .116 | |
| Processing Granularity | |
| CHAPTER 15: PROCESSING AND DRIVE 109 Processing Granularity | |

| High Frequency Shading |
|---|
| What About Gain Shading? |
| Fuzz at the Bottom |
| Multiple Mic Workflows |
| Ground Plane / Boundary Mic Positions |
| |
| SECTION 6 \ STRATEGY |
| C |
| CHAPTER 17: TUNING STRATEGY |
| Studio L/R Nearfield Monitors |
| Coffee House Point Source L/R/Sub |
| Mustc Club L/R/Sub/Fill |
| Theater L/R/Sub/Fill/Underbalc |
| TV Studio (Distributed Mono) |
| Arena (Music Concert) |
| Arena (Installed System) |
| "Shed" with Lawn System |
| CHAPTER 18: CONTROLLING THE VARIABLES 171 |
| Defending the Show |
| CHAPTER 19: COMMON PITFALLS |
| Underspecified Systems |
| Underspecified Mains |
| Underspecified Side Hangs |
| Underspecified Subwoofers |

| Underspecified Front Fills |
|-------------------------------|
| Front Fill Depth |
| Lack of Overshoot |
| Random Microphone Positions |
| 0° Angles |
| Laser beam Centerlines |
| Relying on Autosplay |
| Skipping Verification |
| Filter Myopia |
| Timing with Both Sides On |
| Prioritizing Gear over People |
| Conclusion |
| RECOMMENDED READING |
| Further Resources 190 |