

# From FMAB to RWC2500A Plus: A New Era in Audio Broadcast Testing

Doewe Technologies Application Notes-050-V1.0

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## 1. Introduction

In the field of audio broadcasting, test equipment is a critical tool for ensuring communication quality, optimizing broadcast transmitter performance, and troubleshooting. The FMAB, as a classic audio broadcast testing device, has long held a significant position in the industry due to its stable performance and wide range of applications. However, with rapid technological advancements, user demands for testing equipment have also evolved. Users now require not only powerful performance but also more intuitive data visualization, more convenient operation, and greater mobility. It is against this backdrop that the RWC2500A Plus emerges. It not only inherits the reliable performance of the FMAB but also achieves comprehensive breakthroughs in waveform display, operational convenience, and portability, bringing a brand-new solution to the field of audio broadcast testing.



Figure 1 RWC2500A Plus Exterior

# 2. From Digital to Graphical: A Significant Improvement in

# **Testing Methodology**



As a representative of traditional test equipment, the FMAB's digital display method, while accurate and reliable, requires users to possess considerable expertise and experience. This "numbers without waveforms" approach often intimidates newcomers and feels insufficiently intuitive for experienced engineers during complex troubleshooting.



#### Figure 2 FMAB Digital Test Results

The RWC2500A Plus dramatically changes this landscape. Its high-definition display presents the complete waveform of audio signals in real time, making abstract audio parameters vivid and visual. Engineers can intuitively observe signal trends and quickly identify abnormal waveforms, significantly improving efficiency. This



graphical approach not only lowers the barrier to entry but also makes audio analysis more precise and reliable.

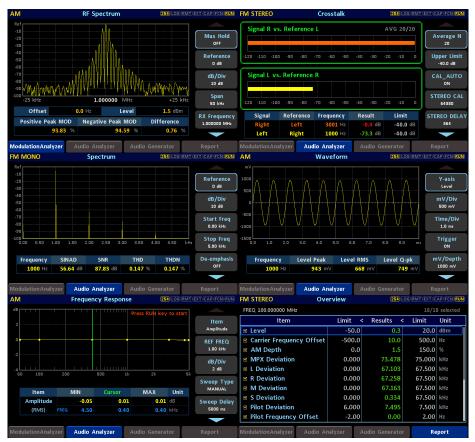


Figure 3 RWC2500A Plus Digital + Graphical Test Results

#### **3. Intelligent Interaction: An Operational Revolution**

#### **Simplifying Complexity**

One of the most frequent complaints from FMAB users is its dauntingly complex menu system. Adjusting a simple parameter often requires navigating through layers of nested menus, akin to finding a way out of a maze. This cumbersome process wastes time and causes frustration during urgent debugging.



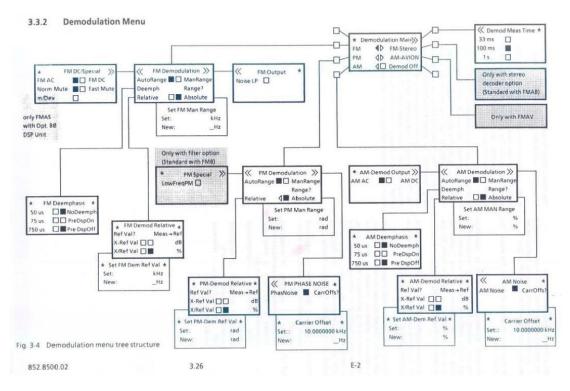


Figure 4 FMAB Menu System

The RWC2500A Plus significantly optimizes this experience. Its menu system is meticulously refined with a flat design philosophy, placing the most frequently used functions within easy reach. Like upgrading from an old feature phone to a smartphone, all operations become intuitive. The main interface clearly displays key parameters, while secondary menus are logically organized—engineers can typically find the functions they need within two or three clicks.



Figure 5 RWC2500A Plus Menu System



This streamlined, intuitive interaction delivers tangible efficiency gains. Settings that once took minutes can now be completed in seconds; previously confusing function options are now clear at a glance. Even newcomers can quickly master the device without spending extensive time memorizing complex procedures. For seasoned engineers, this efficient operation is liberating, allowing them to focus more on audio quality control rather than device manipulation.

#### 4. Anytime, Anywhere: Professional Testing Unbound by Space

In an era of growing demand for mobile solutions, the RWC2500A Plus stands out with its compact design, freeing professional testing from spatial constraints. Compared to traditional equipment, the RWC2500A Plus reduces volume by nearly 50% and weight by approximately 60%, enabling engineers to carry it effortlessly to any worksite.

RWC2500A Plus 的规格:

尺寸: 250×110×348mm

重量: 5Kg





Figure 6 RWC2500A Plus Specifications

Whether in densely equipped broadcast rooms or space-limited OB vans, the RWC2500A Plus adapts perfectly to diverse environments. Its lightweight body occupies minimal workspace while delivering full professional testing capabilities. Constructed with high-quality engineering plastics and a metal frame, it ensures both portability and structural robustness, fully meeting the demands of mobile operations.



### 5. Toward the Future: Perfect Fusion of Professionalism and

#### Convenience

The launch of the RWC2500A Plus represents not just a new product but an innovation in audio testing philosophy. It perfectly blends professional performance with user experience, eliminating the trade-off between precision and convenience. Whether for engineers at major broadcast institutions or technical professionals in broadcast equipment, the RWC2500A Plus delivers an experience beyond expectations.

Choose the RWC2500A Plus, and embrace the future of audio testing. With innovative design thinking, it redefines the standards for professional test equipment, making audio quality control more precise and efficient. In this era of pursuing audio excellence, the RWC2500A Plus will become your trusted partner, empowering you in the competitive industry landscape.

#### 6. Core Business and Product Introduction

Since its establishment, Beijing Doewe Technologies Co., Ltd. has focused on the R&D and production of audio, video, RF test and measurement instruments, and professional data acquisition equipment. We are committed to providing high-precision, high-performance system solutions across industries. The company holds multiple core patents and software copyrights, participates in setting national and industry standards, and owns the registered trademark "DOEWE." We serve sectors including broadcasting, automotive electronics, consumer electronics, and road transportation, offering comprehensive support from hardware to system integration.

Our product portfolio covers professional audio/video test equipment, broadcast testing instruments, automotive electronics testing solutions, and advanced sensing and measurement/control systems, meeting precise measurement needs across scenarios. Addressing industry pain points, we also provide customized solutions for road



transportation, broadcasting, consumer electronics, and more, helping clients enhance efficiency and optimize performance. For any test/measurement requirements or technical inquiries, please contact us at +86-10-64327909. Doewe Technologies is dedicated to providing professional support and services!