

Model 2A vs Model 2 - What's the Difference?

The Model 2A Central Controller builds on the strengths of the popular Model 2 and offers significant improvements. On the outside, the Model 2A retains the extensive set of features and easy-to-use controls that users have come to appreciate. But inside is a complete re-design that leads to improvements in audio quality, reliability, and energy efficiency. Some of the Model 2A's highlights include:

Smaller and Lighter

Maintains one rack space (1U) mounting while reducing the unit's depth by over two inches. Changing to an aluminum enclosure, along with the use of advanced switch-mode power supply circuitry, results in a weight reduction of six pounds. This improvement is especially valuable when the Model 2A is used in mobile applications.



Model 2A Central Controller Front and Back Panel Views

User Controls and Connections Remain the Same

The essentially-identical front-panel design preserves the history of simple, straightforward user operation. To enhance clarity the text and graphics on the Model 2A were slightly revised. All interconnections are identical allowing "drop in" replacement for applications that had traditionally used a Model 2. Pin-for-pin compatibility allows for seamless upgrades to the Model 2A.

Universal Powering

The Model 2A is "universal" powered, requiring 100 to 240 V, 50/60 Hz for operation. This allows direct connection to mains power sources worldwide.

Improved Audio and Enhanced Signal Handling

The audio circuitry has been optimized for both technical quality and user effectiveness. On-air talent and support personnel are presented with clear, "clean" audio that will help them best perform their tasks. A microcontroller integrated circuit has been added to improve signal handling. This results in improved audio level metering, smoother audio control, and support for power-up diagnostics. The performance of the two telephone interfaces is enhanced and includes the addition of a configuration choice for the auto-answer function.

• Improved Talent Amplifier Output

A revised talent amplifier output circuit offers increased output current and party-line intercom termination impedance. This allows more IFB listen-only talent amplifier units to be connected. It also allows creation of a small 2-channel party-line (PL) intercom system. Broadcast-standard user beltpacks can be directly connected and used for monitoring IFB signals as well as communicating with each other.

Cooler and More Reliable

Overall reliability has been improved. This was accomplished by following the best of contemporary design practices and selecting the latest surface-mount components. Special attention was paid to protecting the input and output circuitry from damage due to static (ESD) and disturbances due to RF energy. Multiple high-frequency switch-mode power supply circuits replace the Model 2's linear circuits, offering cooler operation, increased energy efficiently, and improved performance.

Maintains Compatibility

The Model 2A continues to directly support the family of IFB Plus-Series products including the Model 22 Access Station, Model 24 Access Station, Model 32A Talent Amplifier, and Model 33A Talent Amplifier.

In Summary

While there are numerous improvements on the "inside," the Model 2A maintains the "look and feel" of the original Model 2. All inputs and outputs are present in the new unit and, of course, use the same type of connectors. For ease of service, maintenance, or updating the Model 2A is directly "pin-for-pin" compatible with the Model 2. The front panels are essentially identical so users will have the same positive experience that they've become accustomed to: flexible operation, intuitive controls, and great audio performance.

www.studio-tech.com 50109-0913, Issue 1