

# MAG6850

## Network PA Amplifier (1U)



### *Description*

MAG6850 100V network amplifier is a kind of network fully digital analog-digital signal processor supporting 100/10Mbps self-adaptive TCP/IP network transmission protocol; with the design of double network backup, it is allowed to access to any switch simultaneously. Furthermore, this machine has the functions of network line fault detection and automatic selection in order to improve the reliability.

## *Features*

- This machine is made of high-grade aluminum-alloy drawn panel.
- Can be mounted to any place accessible to the network. With the network transmission protocol developed independently by DSPPA, it can achieve the dynamic audio data transmission. With dual network interface redundancy design, it is possible to work crossing the network segments.
- There is a built-in high-efficiency digital amplifier with 100V constant voltage output, resulting in the efficiency higher than 90%.
- There is a MP3 player, a USB port and a SD port, which are used to play the local programs.
- The maximum output power of the amplifier is 500W.
- The eye-catching design of the digital display screen is able to display not only the time of the clock, but also the time of the playing progress.
- With the time frame synchronization mechanism, it can achieve real-time synchronization of the clock of the machine and the clock of the network host.
- The built-in infrared receiving module is under the control of the infrared remote controller, easy to use.
- The panel integrates 5 status indicators to show the working conditions clearly.
- On the panel, there are 8 shortcut buttons, facilitating the daily use of the local user.
- It has the built-in offline local timing-point playing function, and can back up and store the timing programs into the SD card, and back up the timing-point programs automatically.
- Outside the machine, there is a channel of AUX line input, a channel of microphone input, and a channel of AUX line output, in order to facilitate the expansion of other local sound source broadcasting and the expansion of local power.
- Outside the machine, there are two override output interfaces including EMC 24V and short-circuit dry contact, to connect the audio controller of the loudspeaker, or to connect the intelligent power supply.
- It is equipped with the peripheral equipment expansion interface, which is used to connect 86-bottom-case on-demand color screen, double 86-bottom-cases help intercom panel, dual-purpose intercom panel, and the Bluetooth audio receiver.
- On demand: After connecting the 86-bottom-case on-demand color screen, it is possible to achieve the local on-demand of the mass program library of the host.
- Paging: After connecting the 86-bottom-case on-demand color screen, it is possible to implement the real-time paging to the selected zone.
- Intercom: After connecting the help intercom panel, it is possible to achieve help intercom.

- Bluetooth audio receiving: After connecting the Bluetooth extender, it is possible to receive the Bluetooth audios, so as to enable the schools and shopping malls to achieve the sound amplification of the local wireless microphone with the Bluetooth wireless microphone.
- There is a mixed relation between the external line input and the program source for network playing. The local microphone and AUX input will turn on the amplifier by detecting the value of the input signal.
- It is allowed to tailor the linkage trigger function and 100V local emergency line input, in order to facilitate the access to the local public address system for firefighting.
- It has the network playing function, so that it is possible to play the program sources distributed by the network host or audio streams of the network audio collector.
- It is possible to play the background music, emergency paging, and alarm signal from the system host. The network program source has the priority management function at the level 7 or above, and it is classified into the background broadcast, business broadcast, and emergency broadcast.
- It adopts the decoding chip with high-fidelity CD tone to support 16-bit MP3/WMA/WAV/PCM audio stream data decoding with sampling rate at 48KHZ to the maximum extent.
- It adopts fully digital design with advantages such as high performance, high fidelity, and high audio transmission indicator.
- There is built-in watchdog function to guarantee the normal operation of the equipment effectively.
- With the industrial-level chip design, it has wide range of working temperature for outdoor installation and use.
- There is the built-in DSP sound effect processing chip to achieve the function of high and low pitch adjustment, so it is suitable for compensation in different environments so as to further improve the broadcasting indicator.
- It adopts the high-performance network processing chip and independently developed real-time processing system, so that the Boot time is less than 0.1S, and the time for connection to the network host is less than 2S, resulting in the high real-time capacity; and the time delay for broadcasting of real-time program is less than 0.2S.
- The self-developed real-time operating system has strong real-time performance, and the broadcast program sounds of multiple network players are synchronized in real time, and there is basically no time difference.
- It adopts the independently developed network data stream decoding algorithm, microphone paging, and external line broadcasting to realize the strong real-time capacity. The time delay after keeping the paging state for more than 24 hours is less than 0.5S.
- It adopts the independently developed network data correction algorithm to guarantee the accuracy of the data receiving while guaranteeing the real-time data transmission, which is stable and reliable.
- The local output volume and local playing status are controllable.
- The source priority and priority depth of the network source, local line source, and local microphone source can be set via the network.

# Specifications

Index Items		Index Parameters
Model		MAG6850
AUX IN	Input Sensitivity	350mV±50mV
	Frequency Response	80Hz-16kHz(±3dB)
	Distortion	≤1 %
	SNR	≥77 dB
AUX OUT	Rated Output	1000mV±100mV
	Frequency Response	80Hz-16kHz(±3dB)
	Distortion	≤1 %
	SNR	≥75 dB
MIC IN	Input Sensitivity	5mV±1mV
	Frequency Response	80Hz-16kHz(±3dB)
	Distortion	≤1 %
	SNR	≥71 dB
USB/SD/NET Play MP3	Frequency Response	80Hz-16kHz(±3dB)
	Distortion	≤1 %
	SNR	≥77 dB
100V Constant Voltage Output	Rated Output Power	500W
	Frequency Response	80Hz-16kHz(±3dB)
	Distortion	≤1 %
	SNR	≥77 dB
Supported SD Card Capacity		32GB
Supported USB Flash Disk Capacity		32GB
Rated Consumption Power		600W
Power Supply		AC220V/50Hz
AC Fuse		F8AL/250VAC
Over Current, Overheat, Over Voltage Protection		Satisfied
Display Screen		Digital Screen
Gross Weight		6.2kg
Net Weight		4.5kg
Package Dimensions (L×W×H mm)		523×397×90
Machine Dimensions (L×W×H mm)		483×330×45