

# User's Manual

 **Prestel**

## Digital Audio Information Processor

**DSP-6464M**



Specifications are subject to be changed without notice.



Product Features

- Self developed
- Network channel: 64x64, mega network transmission, network transmission backup;
- AEC: support custom addition of independent AEC modules;
- \* Active/Standby mode;
- \* Player: multi-channel audio player, 64G memory, playback format WAV, MP3, support timed playback;
- Graphical user interface can be edited according toneeds, supporting software, web, and mobile control;
- \* Built-in Lua script, providing flexible expansion and customization functions;
- Dual power supply redundancy (AC/DC).

Introduction

DSP-6464M next-generation intelligent digital audio processing server uses two processing chips with a main frequency of 1GHz, which is the core device of the thermal computing power system platform. The thermal computing system platform is based on the rea-time Linux operating system, through independent research and development to achieve better localization functions, drag-and-drop module with a full-English operation interface, with diversified data processing capabilities, relying on the digital network environment to build for a variety of large-scale network audio application scenarios.

The server has network backup and dual-host backup functions, the backup mechanism is set by intelligent algorithms, to realize automatic backup, the main and subordinate server only need to ensure the exact same configuration, it can achieve mirror backup through the system mechanism, based on the heartbeat signal and "static" and "moving" which is the perfect combination of physical backup and logical backup, to achieve node without vulnerabilities, uninterrupted system operation, and thus to ensure the security of the system.

The server contains 8 channels of 300ms AEC input channels, and also has 8 card slots that can be equipped with different types of audio cards, 4-channel analog input cards, 4-channel analog input cards, 4-channel AEC cards, 2-channel/4-channel USB sound cards, etc., to achieve full signal compatibility. A maximum of 32 analog channels are supported locally. Both integrated and independent channels offer extremely high hardware quality, including frequency response, dynamic range and total harmonic distortion. The server supports 64x64 network transmission, the host supports custom board configuration, and can be arbitrarily equipped with input, output card and AEC card, and the openness of the system and server is diversified to complete the use scenarios that meet user needs.

The system has a full-English operation interface, the control operation interface is simple and intuitive; in the control software, through simple mouse operation, you can complete the entire audio system parameters, plan setting and call The graphical control interface is one of the core of this system, and the signal is on spot and can be achieved by installing software on the computer.

| Channel Capacity                       |                                                                                                                                                                                                                               |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network channel capability             | 64x64                                                                                                                                                                                                                         |
| Audio I/o capability                   | 8 audio I/O card slots                                                                                                                                                                                                        |
| * Multi-track player capability        | 16track                                                                                                                                                                                                                       |
| Media storage capacity                 | 64G                                                                                                                                                                                                                           |
| Configure the audio I/o card           | DA-AI4 : 4-channel microphone/line input card<br>DA-AO4 : 4-channel line output card<br>DA-EI4: 4-channel AEC (Echo Cancellation Cartridge/Line IInput Card<br>DA-USB2:2x2USB sound card<br>DA-VolP4: 4-channel IP voice card |
| Dynamic range                          | >118dB                                                                                                                                                                                                                        |
| Frequency Response (±0.2dB)            | 20Hz~20kHz                                                                                                                                                                                                                    |
| Input impedance                        | 5.5kΩ                                                                                                                                                                                                                         |
| Channel crosstalk                      | <-112dB                                                                                                                                                                                                                       |
| Total Harmonic Distortion(THD+N)       | <0.002%                                                                                                                                                                                                                       |
| Common-mode rejection ratio (@odBu)    | >91dBu                                                                                                                                                                                                                        |
| Maximum input level (@ 1 % distortion) | +22dBu                                                                                                                                                                                                                        |

| Control and indicator lights |                                         |
|------------------------------|-----------------------------------------|
| Front panel control          | Touch-based information control buttons |
| Front panel LEDs             | Power Indicator<br>Status Indicator     |
| Information screen           | 3.12 inch flip display                  |

| Control and indicator lights |                                                                                                                                                                             |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RS232/485                    | 6Pin 3.81 mm Phoenix                                                                                                                                                        |
| GPIO                         | 16Pin 3.81 mm Phoenix                                                                                                                                                       |
| Dante Primary                | RJ45 1000Mbps                                                                                                                                                               |
| Dante Secondary              | RJ45 1000Mbps                                                                                                                                                               |
| Network control port         | PC software connects devices or controls communication                                                                                                                      |
| AC mains power               | IEC connector                                                                                                                                                               |
| DC backup power supply       | 24VDC 2A 2pin 5.81 mm Phoenix                                                                                                                                               |
| Voltage                      | 110VAC- 240VAC ,50~60 Hz                                                                                                                                                    |
| Electricity                  | 4A maximum @100VAC(actual current depends on configuration conditions such as I/O slot connection, media memory configuration,DSP configuration, and network configuration) |
| Working temperature range    | 0~45℃                                                                                                                                                                       |
| BTU/h                        | 600 (Estimated value under load)                                                                                                                                            |
| Humidity                     | 85% relative maximum humidity                                                                                                                                               |
| Safety Certificate           | CC CE RoHS FCC                                                                                                                                                              |
| Product Size(W×H×D)          | 483×88×364mm                                                                                                                                                                |
| Packaging Size               | 618×153×473mm                                                                                                                                                               |
| Weight                       | 10KG                                                                                                                                                                        |