

# TG1616 B/S Architecture

## Digital Audio Processor

16x16



### Features

#### Cross-Platform User Interface

Supports custom editing and layout of the control interface, which can then be uploaded to the device. Within the same local area network, users can log in via a browser by accessing the device IP, without restrictions on operating systems or platforms.

#### Flexible Processing Routing

Input and output channels can be edited as needed, with support for deleting, copying, and replacing processing flows to maximize the utilization of DSP resources.

#### Versatile DSP Modules

Includes 6 core algorithm modules (AFC, AGC, AEC, ANS, ANC, AMM); features up to 12-band PEQ with 5 filter types (Parametric, Lowshelf, etc.); outputs support FIR filters with coefficients up to 1024 taps. A total of 30 modules are available for selection.

#### Visualized System Status

Enables intuitive monitoring of DSP resource usage, device voltage, and temperature. Provides real-time feedback on processing flows and signal status, with clear level metering.

#### Extensive Preset Storage

Supports up to 99 presets, with quick renaming in multiple languages. Presets can be configured, saved, and recalled with a single click.

#### Secure and Stable Operation

Supports dual-device hot backup, enabling fast master-slave system setup via heartbeat detection. Equipped with user management functions, including password verification for standard accounts, ensuring dual security at both hardware and software levels.

#### Multiple Control Options

Compatible with four control panels: NCP-1, NCP-3, NCP-3II, and NCP-4. Supports custom interfaces and third-party central control systems. Control commands can be directly obtained from the software for flexible and convenient operation.

### Specifications

|                                 |                                                                       |
|---------------------------------|-----------------------------------------------------------------------|
| Balanced MIC/LINE Analog Inputs | 16                                                                    |
| Balanced LINE Analog Outputs    | 16                                                                    |
| USB Channel                     | 2x2                                                                   |
| Sampling Rate                   | 48 kHz                                                                |
| AD/DA Bit Depth                 | 24Bit                                                                 |
| Input Gain                      | 0-48 dB (adjustable in 3 dB steps, 17 levels)                         |
| Phantom Power                   | +48V/10mA max                                                         |
| Frequency Response              | 20Hz~20kHz (+0/-0.3dB)                                                |
| Maximum Level                   | +18dBu                                                                |
| THD+N                           | ≤0.002% (1kHz, +4dBu A-weighted)<br>≤0.003% (1kHz, +17dBu A-weighted) |
| Device Noise Floor              | ≤-95dBu (A-weighted)                                                  |
| Input Dynamic Range             | ≥113dB                                                                |
| Output Dynamic Range            | ≥113dB                                                                |
| Input CMRR                      | > 56dB Avg@1kHz, 0dBu                                                 |
| Output Crosstalk                | -122dB (1kHz, 0dBu)                                                   |
| Input Impedance (Balanced)      | 5.4KΩ                                                                 |
| Output Impedance (Balanced)     | 600Ω                                                                  |
| System Latency                  | 4.2ms                                                                 |
| Power Supply                    | 110~240V AC, 50/60Hz                                                  |
| Rated Power Consumption         | 35W                                                                   |
| Dimensions (W × D × H)          | 482 × 259 × 45mm                                                      |
| Shipping Weight (Net / Gross)   | 3.54kg/3.93kg                                                         |