

NBS-2401

Multi-channel Audio Terminal

SPON Multi-channel Audio Terminal NBS-2401 with standard 1U rack-mounted design , it can be used as an audio encoder or an audio decoder.It can connect 4 power amplifiers and remotely manage power amplifiers; it can also be connected to external audio sources, broadcast to a specified area through SPON management software.

MAIN FEATURES

▲ Design and Mounting

- 1U Rack-Mounted Design: Compact form factor for easy installation in standard server racks.
- Anti-Corrosion Brushed Aluminum Panel: Ensures durability and longevity, suitable for various environments.
- Hardware Audio Encoding: Utilizes hardware-based encoding for efficient and reliable audio processing.

▲ Network Performance

- Ultra-Low Network Delay: Achieves minimal delay in sound transmission, with broadcast delay ≤ 30ms.
- Standard RJ45 Interface: Equipped with RJ45 interface for seamless integration into Ethernet networks.
- Cross-Segment and Cross-Router Support: Compatible with various network configurations for flexible connectivity.

▲ Audio Processing and Connectivity

- Independent Network Decoder Chips: Features 4-way decoder chips capable of simultaneous decoding of 4-way digital audio.
- Remote Volume Adjustment: Allows remote adjustment of volume for individual audio input channels via the network.
- Relay Inputs and Outputs: Provides 4-channel relay inputs and outputs for easy integration with third-party devices.

SPECIFICATION

Power Parameters	
Power Supply	AC180V~240V
Power Consumption	≤20W

Audio Parameters	
Audio Codec	MP3, PCM, ADPCM
Audio Sampling & Bit Rate	22.05kHz~48kHz, 16bit
S/N(Broadcast-Speaker)	>90dB
Frequency Response	20Hz~16KHz

Network Parameters	
Network I/F:	10BASE-T/100BASE-TX RJ45
Network Protocol:	HTTP, TCP/IP, UDP, ARP, ICMP, IGMP
Configuration Method:	Web Interface Or DevConfig Tool

Mechanical&Environment Properties	
Mounting Method	Rack-Mounted
Installation Environment	Dry Indoor Locations Only
Operating Temperature	-10°C~+50°C
Operating Humidity	≤90% RH Non-Condensing
Housing Material	Metal
Color	Black
Product Dimensions	483×183×44mm
Product Weight	4.2kg
Product Warranty	2 Years Limited

Accessories

1 × Quick Installation Guide
4 × RCA Audio Cable
1 × Power Cord(3×1.0mm2/1.5m)(Optional)
4 × Terminal(3.5-5P)
4 × Terminal(3.5-4P)

INTERFACE DESCRIPTION

[Front Panel]



① Main power switch

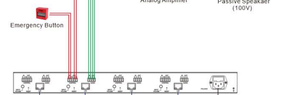
② Power switch of each module

③ S1
Power indicator light of each module, the light is ON in green after power on; when power off, the light is OFF.

④ STATUS
Status indicator light, the light is ON in green in online status; when receiving broadcasting or in the firmware upgrade mode, the green light is quickly flash, and OFF in offline status.

⑤ SIGNAL
Signal indicator light, the light is OFF in idle status, when the line input signal, the light is ON in orange, brightness with audio signal strength change (the louder the volume, the light is brighter).

[Rear Panel]



⑥ Alarm Input/Output Interface

OUT: C: alarm output interface (NC: alarm output normal close contact;
C: alarm output public contact; NO: alarm output normal open contact)
IN: alarm input interface (E: alarm input ground; H: alarm input)

⑦ AUDIO: Audio input/output interface

OUT: OUT: audio output interface (E: audio output reference, H: audio signal output, 1Vrms/600Ω, imbalance)
IN: IN: audio input interface (E: audio input reference, H: audio signal input, 1Vrms/10KΩ, imbalance)

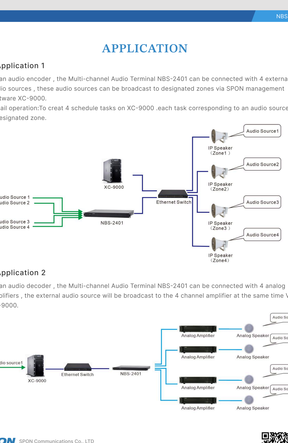
⑧ INPUT VOLUME
Input Volume Adjustment Knob, Clockwise Increase The Volume, Counterclockwise Reduce The Volume.

⑨ RESET
Press The Button To Reset To Defaults (Or Firmware Upgrade), Broadcast IP.

Button	Function
Mandatory restore IP address	Press the button with power 3s continuously
Mandatory access firmware upgrade interface	Press the button, and then power the device, hold the button for 5 seconds
Broadcast IP	Power ON, under the situation of network offline, short press the button and release.

⑩ LAN: Network Interface ⑪ Power Interface ⑫ Grounding Switch

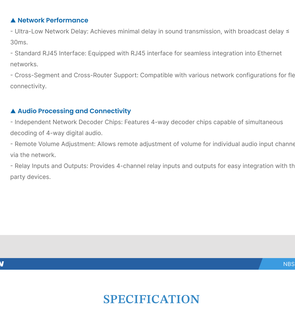
CONNECTION DIAGRAM



APPLICATION

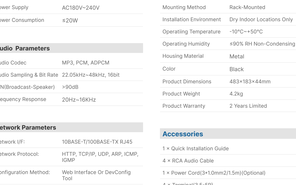
Application 1

As an audio encoder , the Multi-channel Audio Terminal NBS-2401 can be connected with 4 external audio sources , these audio sources can be broadcast to designated zones via SPON management software XC-9000.
Detail operation:To creat 4 schedule tasks on XC-9000 ,each task corresponding to an audio source and a designated zone.



Application 2

As an audio decoder , the Multi-channel Audio Terminal NBS-2401 can be connected with 4 analog amplifiers , the external audio source will be broadcast to the 4 channel amplifier at the same time Via XC-9000.



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