

# NETWORK AUDIO ADAPTER

NX - 300(W)

### **■**DESCRIPTION

The TOA NX-300 is a network audio adapter that utilizes packet audio technology (\*1). Connecting the NX-300 to a network (LAN or WAN) permits high-quality audio or contact control signals to be transmitted in real time. As existing networks can be used, systems can be constructed with no need for the installation of new wiring. Broadcasts using audio files and up to 8 different levels of priority control can also be made, and provided by stations, factories or other central facilities to individual bases. It can be mounted in an EIA equipment rack (1U size) with the use of an optional rack mounting bracket or installed on a wall using an optional wall mounting bracket.

(\*1) TOA's unique technology which makes it possible to transmit high—quality audio signals in real time over an IP network.

### ■ SPECIFICATIONS

Power Source	Supplied from an external 24 V DC (21.6 - 26.4 V) power supply or
	AC adapter AD-246 (option) or the equivalent
Power/Current Consumption	10 W (AC operation), 310 mA (DC operation)
Audio Input	2 channels, balanced (transformer isolated)/unbalanced changeable, 2 k $\Omega$ ,
	LINE/MIC changeable, volume adjustable
	Rated input: -20 dB (*2) (LINE)/-60 dB (*2) (MIC)
	PAD function (-16 dB (*2)), removable terminal block (6 pins)
Audio Output	$2$ channels, balanced (transformer isolated), 600 $\Omega$ or less
	Rated output: 0 dB (*2) (unbalanced input)/-2 dB (*2) (balanced input),
	removable terminal block (6 pins)
Frequency Response	50 Hz - 18 kHz
	(48 kHz sampling frequency, PCM, 0 to $-6$ dB deviation referred to 1 kHz)
Distortion	0.2 % or less (1 kHz, LINE signal level, 48 kHz sampling frequency, PCM, BPF)
Signal to Noise Ratio	73 dB or more (LINE signal level, at rated output)
Separation	70 dB or more (1 kHz, LINE signal level, BPF)
Audio Format	WAV file
Number of Storable Audio Files	
Storable Time of Audio File	Max. 2 min. per audio file
	(16 kHz sampling frequency, sub-band-ADPCM, monaural operation)
Control Input	8 channels, no-voltage make contact input,
	open voltage: 24 V DC, short-circuit current: 2 mA or less,
	removable terminal block (9 pins) (Only Channel 8 equipped with failure detection.)
Control Input Failure	Connection resistance to make the function inactive: 20 k $\Omega$ $\pm 5$ %
Detection Section	Connection resistance to make the function active: 10 k $\Omega$ $\pm 5$ %
	Connector cable: Twisted pair cable (shielded type is recommended)
	Maximum cable distance: 10 m
Control Output	8 channels, open collector output (polarized), withstand voltage: 30 V DC,
	control current: 50 mA max., removable terminal block (9 pins)
	2 channels, relay output (non-polar), withstand voltage: 30 V DC,
	control current: 500 mA max., removable terminal block (4 pins)
Network Section	Network I/F: 10BASE-T/100BASE-TX, Full-duplex/Half-duplex Auto-negotiation
	Network protocol: TCP, UDP, ARP, HTTP, RTP, IGMPv2, FTP, NTP
	Audio packet transmission system: Unicast (Up to 16 simultaneous transmissions),
	Multicast (Up to 64 simultaneous transmissions)
	Connector: RJ45 connector
	Voice sampling frequency: 8 kHz, 16 kHz, 32 kHz, 48 kHz
	(controllable on the software)
	Quantifying bit number: 16 bits
	Voice encoding method: PCM, Sub-band ADPCM (controllable on the software)
	Voice packet loss recovery: Silence insertion
	Audio delay time: Min. 20 ms
Operation	2 channels, Audio input level control (Convertible to Audio output level control)
Indicator	2 channels, audio input, SIGNAL (green)/PEAK (red),
	2 channels, audio output, SIGNAL (green)
	LNK/ACT (green), BUSY (green), STATUS (green), ERROR (yellow), RUN (green)
Setting Switch	Reset, grand lift changeable, audio input 2 channels PAD changeable,
	audio input 2 channels LINE/MIC changeable
SD Section	For log storage (Max. 10000)
	Media: SD/SDHC card (Max. 32 GB) (*3)
	File system: FAT16, FAT32
	Trile System. FATTO, FATTO
	W Use only SD memory cards rated at 100mA current consumption or less.

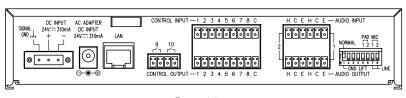
## ■ SPECIFICATIONS

Installation Method	Rack, Desk, Surface mount
Operating Temperature	-10 °C to +50 °C (14 °F to 122 °F)
	(0 °C to +40 °C (32 °F to 104 °F) when AC adapter is in use)
Operating Humidity	90 %RH or less (no condensation)
Finish	Pre-coated steel plate, black, 30 % gloss
Dimensions	210 (W) × 44.3 (H) × 258 (D) mm (8.27" × 1.74" × 10.16")
Weight	1.7 kg (3.75 lb)
Accessory	Removable terminal plug (3 pins)1, Removable terminal plug (6 pins)2,
	Removable terminal plug (9 pins)2, Removable terminal plug (4 pins)1,
	Plastic foot …4, Screw for fitting plastic foot …4
Option	Rack mounting bracket: MB—15B—BK (for rack mounting one NX—300 unit)
	MB-15B-J (for rack mounting two NX-300 units)
	Wall mounting bracket: YC-850
	AC adapter: AD-246

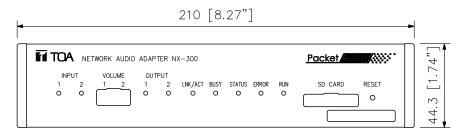
Notes: The NX-300 cannot be connected to other equipment using the MB-15B-J bracket for rack mounting.
When you need the AC adapter, be sure to consult your TOA dealer.

(\*2) 0 dB = 1 V (\*3) Not compatible with SDXC memory cards.

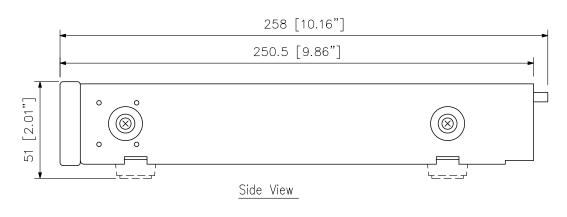
### ■ APPEARANCE



Rear View



Front View



SCALE: 1/2 UNIT: mm