N-8000MI CU

MULTI INTERFACE UNIT

The N-8000MI is a multi-interface unit designed for use with TOA's packet intercom system (IP network-compatible intercom system) that employs the packet audio technology. Connecting the multi-interface to a local area network permits the ideal system for in-house or wide-area information transmission applications, such as paging, periodical broadcasts, and background music broadcasts, to be built between the multi-interface and IP intercom exchange or other multi-interface unit. The contact bridge function can be realized through contact input and output control. The N-8000MI also features the tie-line function to be connected to the EXES-2000 intercom system or the EXES-6000 system. A total of up to 192 multi-interface units and IP intercom exchanges can be connected to a network. The unit can be mounted in an EIA standard rack (1-unit size) or to a wall using the supplied bracket.

Key features

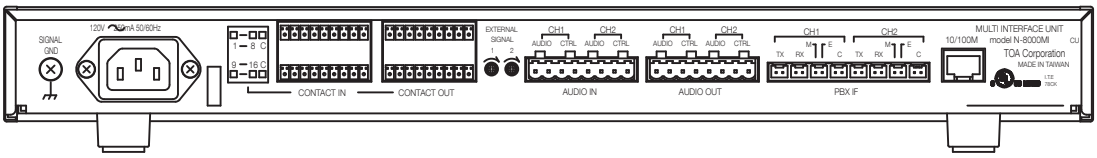
- 10 Base-T / 100 Base-TX Ethernet network connection
- 16x Contact Input / 16x Contact Output
- Function to diagnose system line and network status
- 2x Audio Inputs: Paging, BGM
- 2x Audio Outputs: Paging

Specifications

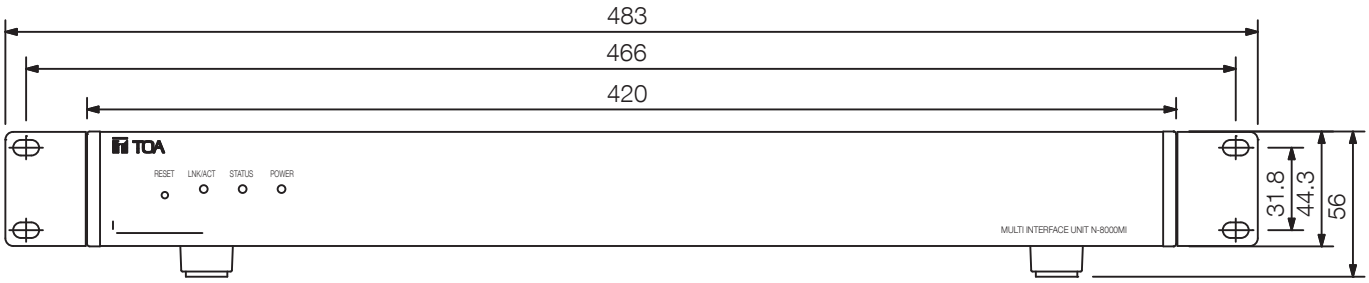
(*1) 0 dB = 1 V, (*2) 0 dB = 0.775 V

Power Source	120 V AC, 50/60 Hz
Power Consumption	16 W (250 mA) (at rated), 21 W (330 mA) (max.)
Audio Input	Input: 2 inputs (2 P/input), Max. 0 dB (*1), 600 Ω or less, balanced, with a semi-fixed volume for adjustment (0 to -25 dB) Control: 2 inputs (2 P/input), no-voltage make contact input, open voltage: 12 V DC, short-circuit current: 10 mA Removable terminal block (8 pins)
Audio Output	Output: 2 outputs (2 P/output), Max. 0 dB (*1), 600 Ω or less, balanced Control: 2 outputs (2 P/output), relay contact output, contact capacity: 24 V DC/0.5 A Removable terminal block (8 pins)
Contact Input	16 inputs, no-voltage make contact input, open voltage: 12 V DC, short-circuit current: 10 mA, removable terminal block (18 pins)
Contact Output	16 outputs, relay contact output, contact capacity: 24 V DC/0.5 A, removable terminal block (18 pins)
PBX I/F	PBX input and output: 2 channels, Max.: 0 dB (*2) or less, Average: -15 dB (*2) or less, 600 Ω, balanced, mini-clamp connector (2 pins), with adjustment functions for both input and output (Input: 0 to +15 dB, Output: -15 to 0 dB), Analog E & M interface
Tie-line I/F	Tie-line input and output: 2 channels, Max.: 0 dB (*2) or less, Average: -15 dB (*2) or less, 600 Ω, balanced, mini-clamp connector (2 pins) Signal method: EXES-2000/EXES-6000 tie-line method Selective signal: DTMF signal
Network Section	Network I/F: 10BASE-T/100BASE-TX (Automatic-Negotiation) Network protocol: TCP/IP, UDP, HTTP, RTP, ARP, ICMP, IGMP Audio packet transmission system: Unicast, Multicast Number of paging destinations: Unicast (max. 16), Multicast (max. 191) Connector: RJ45 connector Voice sampling frequency: 16 kHz, 8 kHz (controllable on the software) Quantifying bit number: 16-bit Voice encoding method: Sub-band ADPCM, Cryptosystem Voice packet loss recovery: Silence insertion Audio delay time: 80 ms, 320 ms (controllable on the software)
Indicator	Network LNK/ACT indication, Status lamp, Power-on indication lamp
Other	Firmware update function, System registration data entry hold facility, Time of day hold facility, Reset switch (front panel)
Installation Method	Rack, Desk, Surface mount
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	90 %RH or less (no condensation)
Finish	Pre-coated steel plate, black, 30 % gloss
Dimensions	420 (W) x 44.3 (H) x 239.5 (D) mm (16.54" x 1.74" x 9.43")
Weight	2.8 kg (6.17 lb)
Included Accessories	AC power cord (2 m) …1, CD (for PC setting, maintenance use) …1, Mini-clamp plug (2 pins) …10, Removable terminal plug (8 pins) …2, Removable terminal plug (9 pins) …4, Plastic foot …4, Screw for fitting plastic foot …4, Rack mounting bracket …2, Screw for rack mounting …4, Wall mounting bracket …2, Screw for mounting bracket …8, Screw for wall mounting …4

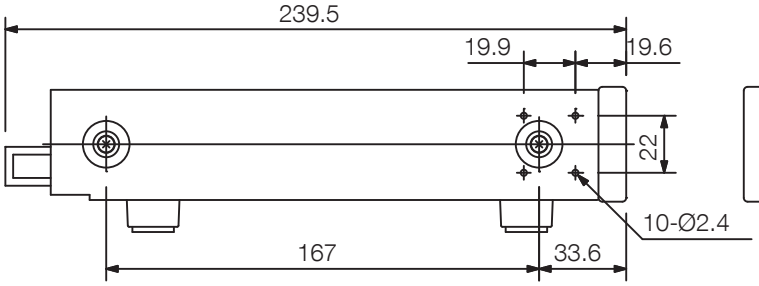
Dimensions



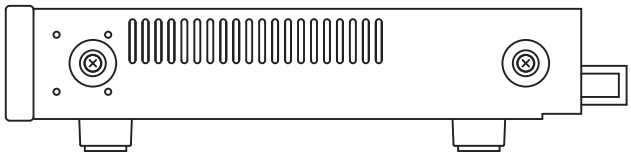
Rear View



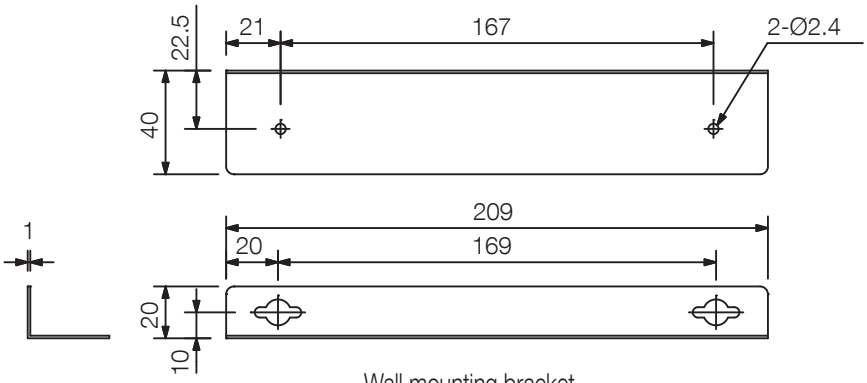
Front View



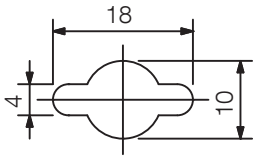
Left Side View



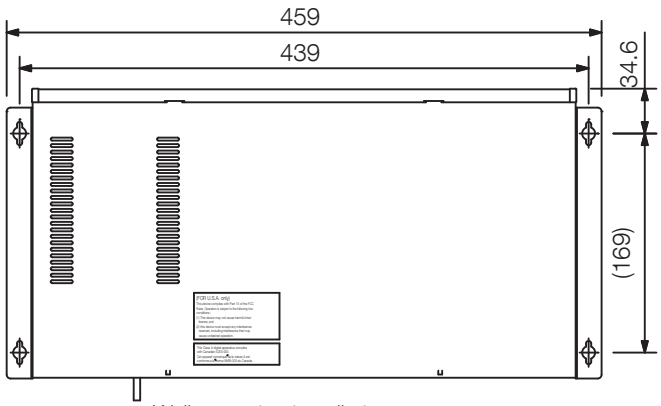
Right Side View



Wall mounting bracket
(accessory)



Dimensions of
wall mounting hole
(scale: 1/1)



Wall mounting installation
(scale: 1/6)

UNIT:mm SCALE:1/3

A&E specifications

Universal interface for connecting to external systems,
configurable/programmable for:
-Announcements, activated 2 audio inputs for the supply of background music or control inputs
-2 Audio outputs for the transmission of announcements in external audio systems (E.g. PA systems),
-2 Connections to a telephone system with pulse or tone dialing,
-2 Leased line connections to EXES-2000 and
EXES-6000 intercom systems,
-16 Control inputs for zone control for externally-powered announcements, dial-up, receiving a busy signal of an external audio system, switching on control output
-16 Control outputs: can be activated by a number of the stations and automatically when a call (E.g. to activate camera system), occupied and error display
Automatic system diagnosis (every 20 seconds) of receivers, teaching units, IP Intercoms and universal interface for network status, CPU error, synchronization problems and missing receivers.