TOA

IP INTERFACE MODULE   SX-200IP

Thank you for purchasing TOA's IP Interface Module.
Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

1. SAFETY PRECAUTIONS

• Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
• Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
• After reading, keep this manual handy for future reference.

⚠ WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

• Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.

• Should the following irregularity be found during use, immediately turn off the power supply to the SX-2100AI Audio Input Unit where the SX-200IP is installed and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.

· If you detect smoke or a strange smell coming from the unit
· If water or metallic object gets on the circuit board
· If the unit falls or breaks
· If it is malfunctioning (no tone sounds.)

2. GENERAL DESCRIPTION

The SX-200IP, designed to be installed in the SX-2100AI Audio input unit of the SX-2000 series, is an Interface module for connection to the N-8000 series.
By connecting the SX-200IP to a network (LAN or WAN), paging announcements can be made to the SX-2000 system using the N-8000 series' station(s) (N-8600MS and N-8610RM) employing the packet audio technology. Each function is set by the dedicated setting software on a PC.

3. FEATURES

• Up to 8 SX-200IPs can be used per SX-2000 System.
• Paging announcements can be made to up to 8 SX-2000 systems using the SX-200IPs.

4. SPECIFICATIONS

Network Section	Network I/F:	10BASE-T/100BASE-TX (Automatic-Negotiation)
	Network protocol:	TCP/IP, UDP, HTTP, RTP, ARP, ICMP, IGMP
	Connector:	RJ45 connector for LAN
	Voice sampling frequency:	16 kHz, 8 kHz (controllable on the software)
		48 kHz sample rate is used for SX-2000 system only.
	Quantifying bit number:	16 bits
	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	Operation indicator (RUN)	
Operating Temperature	0 to 40 °C	
Operating Humidity	90% RH or less (no condensation)	
Finish	Panel: Pre-coated steel plate, black, 30% gloss	
Dimensions	35 (w) x 119.5 (h) x 178.4 (d) mm	
Weight	150 g	

Note: The design and specifications are subject to change without notice for improvement.
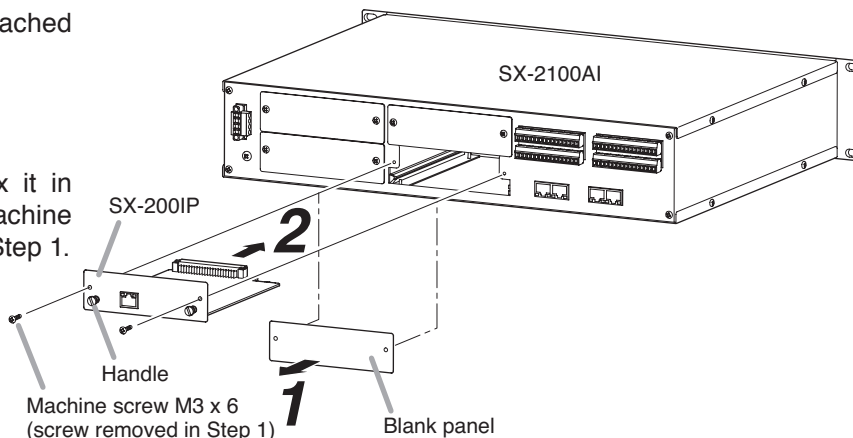
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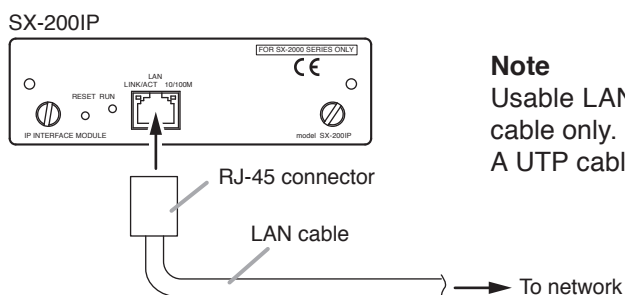
5. MODULE INSTALLATION

Notes
- Make sure that the power is switched OFF before attaching or detaching SX-200IPs.
- To avoid failures due to static electricity, do not touch the parts on the SX-200IP circuit board.
- Ensure that the SX-200IP is installed and secured with screws in the correct position.
- Two silver slotted screws at the left and right sides of the front panel are handles used for module detachment. Never rotate them because they do not function as screws.

Step 1. Remove the blank panel attached to the SX-2100AI's slot.

Step 2. Mount the SX-200IP.
Insert the SX-200IP and fix it in place using the screws (Machine screws M3 x 6) removed in Step 1.

6. CONNECTION

Note
Usable LAN cable is a STP Category 5 or greater straight through cable only.
A UTP cable cannot be used.

7. NOTES ON SETTING

It is necessary to perform SX-200IP setting using both the SX-2000 Setting software and N-8000 Setting software.

7.1. SX-2000 Setting Software

The SX-200IP is recognized as the "D-922E/F" in the SX-2000 system. Set the SX-200IP as the "D-922E/F" on the SX-2000 Setting software. For the settings, read the SX-2000 Software instruction manual.

7.2. N-8000 Setting Software

For the settings, read chapter 5 of the N-8000 series instruction manual.

8. SX-200IP OPERATING REQUIREMENTS IN THE SX-2000 SYSTEM

- The SX-2000 Setting Software used for SX-2000 system settings should be Version 3.10 or later.
- The SX-2000 system components should be of the following firmware versions.

SX-2000SM, SX-2100AI, SX-2000AO, SX-2100AO	Version 3.10 or later
SX-2000CI, SX-2000CO	Version 2.01 or later

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