

AUDIO OUTPUT UNIT

SX-2100A0

■ DESCRIPTION

The SX-2100AO is an audio output of the matrix system and can be mounted in an EIA equipment rack (2 U size). Multiple units can be decentralized in a whole system. It is equipped with eight audio outputs, and two inputs can be mixed and output. It is also equipped with eight control inputs, and eight control outputs. The SX-2100AO receives audio signals from the audio input unit via digital transmission, but an analog audio input function (1 channel) enables simultaneous all-zone calls for use in emergency situations. Audio output levels are indicated on the level meters provided for each output channel. Volumes can be adjusted for each channel using the volume controls on the front panel or the SX-2000 software. The volume controls can be locked. Any output channel can be monitored using the internal speaker. Two channels of local audio inputs with control inputs are provided as the dedicated audio inputs. Its functions include an amplifier switching function that automatically switches the power amplifier to the standby amplifier if the power amplifier fails, and a surveillance function that self-diagnoses the speaker lines. Equipped with two channels of interfaces for connecting to the Emergency Power Supply units, making it possible to configure the system to operate during a power failure. One control IN/OUT interface allows the number of control inputs and outputs to be increased. The SX-2100AO has two power inputs and can support a dual-redundant power supply system. power supply system.

■ SPECIFICATIONS

* 0 dB = 1 V

24 V DC (operation of range: 20 V - 40 V DC) Two power inputs construction enables dual-redundant power supply. 1.7 A or less (maximum value in the power operating range) 1.2 A or less (when operated on 24 V DC) Note: But except current consumption of the external equipment of which power is supplied from the unit. 18 alphanumeric characters, Level indication (8 outputs, monitor), Status indicators, Power indicator, CPU OFF indicator Operation Function button, Output level control, Monitor speaker volume control, ON/OFF switch, Operation button PA Link Audio Output 8 outputs and standby AMP, 0 dB*, suitable load: 600 Ω or above, electronically-balanced, RJ45 Connector monitoring possible using built-in speaker Frequency response: 20 Hz - 20 kHz Sampling frequency: 48 kHz D/A converter: 24 bit Connection Cable Maximum Cable Distance Shielded Category 5 twisted pair cable (CAT5-STP) Audio Input Audio Input 2 inputs, 0 dB*, 10 kΩ, electronically-balanced, RJ45 Connector Audio Input Audio Input Control Input 2 inputs, 0 dB*, 10 kΩ, electronically-balanced, RJ45 Connector Connection Cable Shielded Category 5 twisted pair cable (CAT5-STP) Connection Cable Shielded Category 5 twisted pair cable (CAT5-STP) Sompling frequency: 48 kHz A/D converter: 24 bit Control Input 2 inputs, no-voltage make contact input, open voltage: 12 V DC, short-crouit current: 2 mA, photo coupler input Connection Cable Distance Shielded Category 5 twisted pair cable (CAT5-STP) To be connected via the switching hub specified by TOA Note: This network must be made completely independent from other LAN. Maximum Cable Distance Analog Link Input: 1 input, RJ45 connector	Power Source	Usable power supply unit: VX-200PS
Two power inputs construction enables dual-redundant power supply. Current Consumption 1.7 A or less (maximum value in the power operating range) 1.2 A or less (when operated on 24 V DC) Note: But except current consumption of the external equipment of which power is supplied from the unit. Indication 18 alphanumeric characters, Level indication (8 outputs, monitor), Status indicators, Power indicator, Standby indicator, CPU OFF indicator Operation button, Output level control, Monitor speaker volume control, ON/OFF switch, Operation button PA Link Audio Output 8 outputs and standby AMP, 0 dB*, suitable load: 600 Ω or above, electronically-balanced, RJ45 Connector monitoring possible using built-in speaker Frequency response: 20 Hz - 20 kHz Sampling frequency: 48 kHz D/A converter: 24 bit Connection Cable Shielded Category 5 twisted pair cable (CAT5-STP) Maximum Cable Distance 5 m (164 ft) Usable Amplifier VP-2064, VP-2122, VP-2241 or VP-2421 (VP-200VX is required for each amplifier.) Local Audio Input 2 inputs, 0 dB*, 10 kΩ, electronically-balanced, RJ45 Connector Audio Input 5 Frequency response: 20 Hz - 20 kHz Sampling frequency: 48 kHz A/D converter: 24 bit Control Input 7 Ergeuncy response: 20 Hz - 20 kHz Sampling frequency: 48 kHz A/D converter: 24 bit Control Input 8 Shielded Category 5 twisted pair cable (CAT5-STP) SX Link Network I/F 2 100BASE-TX circuits, RJ45 connector, decentralized installation possible Connection Cable Shielded Category 5 twisted pair cable (CAT5-STP) SX Link Network I/F 2 100BASE-TX circuits, RJ45 connector, decentralized installation possible Shielded Category 5 twisted pair cable (CAT5-STP) To be connected via the switching hub specified by TOA Note: This network must be made completely independent from other LAN. Maximum Cable Distance 10 m (109.36 yd) (between this unit and a switching hub) Analog Link Input: 1 input, RJ45 connector Output: 1 output, RJ45 connector Output: 1 output, RJ45 connector Output: 1 output, RJ45 connector Output: 1	1 Ower Source	24 V DC (operational range: 20 V = 40 V DC)
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short—circuit current: 2 mA, photo coupler input Connection Cable Shielded Category 5 twisted pair cable (CAT5—STP) SX Link Network I/F Connection Cable/Device Shielded Category 5 twisted pair cable (CAT5—STP) To be connected via the switching hub specified by TOA Note: This network must be made completely independent from other LAN. Maximum Cable Distance 100 m (109.36 yd) (between this unit and a switching hub) Analog Link Input/Output Connector Output: 1 input, RJ45 connector Output: 1 output, RJ45 connector Connection Cable Shielded Category 5 twisted pair cable (CAT5—STP) (1 pair of audio wire + 1 pair of control wire (CPU OFF) + 1 pair of control wire (system reset/standby) + 1 pair of connection check wire)	Control Input	2 inputs, no-voltage make contact input, open voltage: 12 V DC.
Connection Cable Shielded Category 5 twisted pair cable (CAT5—STP) SX Link Network I/F 2 100BASE—TX circuits, RJ45 connector, decentralized installation possible Connection Cable/Device Shielded Category 5 twisted pair cable (CAT5—STP) To be connected via the switching hub specified by TOA Note: This network must be made completely independent from other LAN. Maximum Cable Distance 100 m (109.36 yd) (between this unit and a switching hub) Analog Link Input/Output Connector	'	short-circuit current: 2 mA, photo coupler input
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Note: This network must be made completely independent from other LAN. Maximum Cable Distance 100 m (109.36 yd) (between this unit and a switching hub) Analog Link Input/Output Connector	Connection Cable/Device	Shielded Category 5 twisted pair cable (CAT5—STP)
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Analog Link Input/Output Connector		Note: This network must be made completely independent from other LAN.
Input'Output Connector Output: 1 input, RJ45 connector Output: 1 output, RJ45 connector Connection Cable Shielded Category 5 twisted pair cable (CAT5—STP) (1 pair of audio wire + 1 pair of control wire (CPU OFF) + 1 pair of control wire (system reset/standby) + 1 pair of connection check wire)		100 m (109.36 yd) (between this unit and a switching hub)
Output: 1 output, RJ45 connector Connection Cable Shielded Category 5 twisted pair cable (CAT5—STP) (1 pair of audio wire + 1 pair of control wire (CPU OFF) + 1 pair of control wire (system reset/standby) + 1 pair of connection check wire)	Analog Link	
Connection Cable Shielded Category 5 twisted pair cable (CAT5—STP) (1 pair of audio wire + 1 pair of control wire (CPU OFF) + 1 pair of control wire (system reset/standby) + 1 pair of connection check wire)	Input/Output Connector	
Connection Cable Shielded Category 5 twisted pair cable (CAT5—STP) (1 pair of audio wire + 1 pair of control wire (CPU OFF) + 1 pair of control wire (system reset/standby) + 1 pair of connection check wire)		Output: 1 output, RJ45 connector
1 pair of control wire (system reset/standby) + 1 pair of connection check wire)	Connection Cable	Shielded Category 5 twisted pair cable (CAT5—STP)
1 pair of control wire (system reset/standby) + 1 pair of connection check wire) Maximum Cable Distance Total length of angled link: 800 m (874.89 vd)		
Maximum Cable Distance Total length of anglog link: 800 m (874.89 vd)		1 pair of control wire (system reset/standby) + 1 pair of connection check wire)
maximam cable distance rotal length of analog link. 000 in to74.03 yar	Maximum Cable Distance	Total length of analog link: 800 m (874.89 yd)



AUDIO OUTPUT UNIT

SX-2100A0

■ SPECIFICATIONS

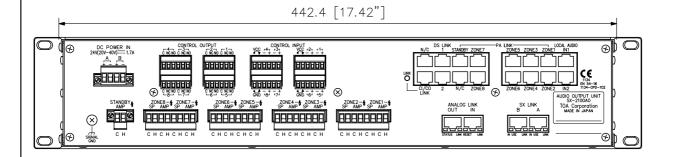
DS Link		
Usable Unit	VX-2000DS	
Connector/Cable	2 interface, RJ45 Connector, Shielded Category 5 twisted pair cable (CAT5-STP)	
Maximum Cable Distance	5 m (16.4 ft)	
CI/CO Link		
Usable Unit	SX-2000CI or SX-2000C0	
Connector/Cable	1 interface, RJ45 Connector,	
	Shielded Category 5 twisted pair cable (CAT5—STP)	
Maximum Cable Distance	800 m (874.89 yd)	
Speaker Line Failure Detection Section		
Connector/Cable	Removable terminal block, SP/AMP: 8 pins, STANDBY AMP: 2 pins, AWG 24 - AWG 16	
Maximum Input	100 Vrms, 5 Arms	
Fault Detection System	Short circuit, open circuit, ground fault	
Method	Impedance or End of line	
End of Line	In case of normal: Terminated by 470 k Ω between the speaker line and the shield In case of open: Opened between the speaker line and the shield	
Impedance	Minimum load: 2 k Ω (5 W) at 100 V line	
Control Input	8 inputs, no-voltage make contact input, open voltage: 40 V DC or less,	
· '	short—circuit current: 2 mA, photo coupler input, removable terminal block (6 pins)	
Control Output	8 outputs, Form C contact, no-voltage make contact output, relay contact output	
	(withstand voltage: 40 V DC, control current: 2 - 300 mA),	
	removable terminal block (6 pins)	
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)	
Operating Humidity	35 % to 80 %RH (no condensation)	
Finish	Panel: Aluminum, black, alumite	
	Case: Surface—treated steel plate	
Dimensions	482 (W) × 88.4 (H) × 349 (D) mm (18.98" × 3.48" × 13.74")	
Weight	7.1 kg (15.65 lb)	
Accessory	Removable terminal plug (8 pins)4, Removable terminal plug (6 pins)8,	
	Removable terminal plug (4 pins)1, Removable terminal plug (2 pins)1,	
	Rack mounting screw4	



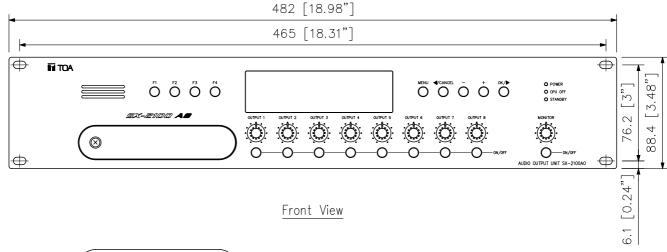
AUDIO OUTPUT UNIT

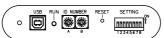
SX-2100A0

■ APPEARANCE

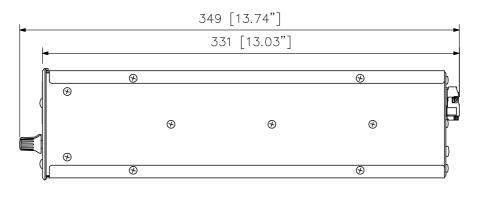


Rear View





Inside of the protective cover



Side View

UNIT: mm SCALE: 1/3