

■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.

■SPECIFICATIONS

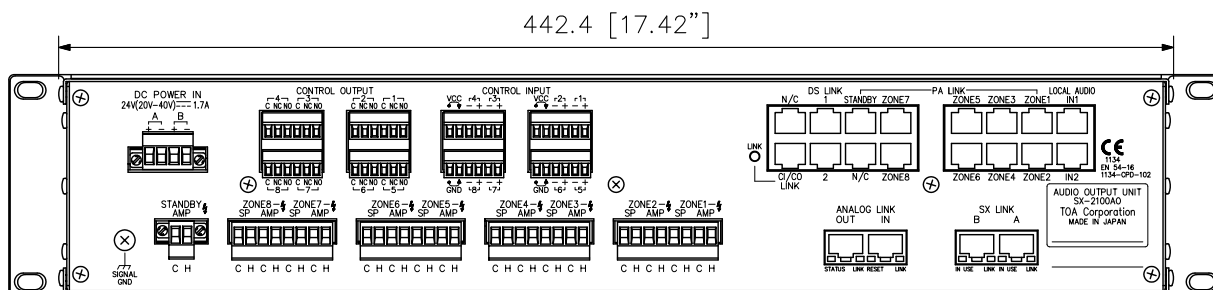
* 0 dB = 1 V

Power Source	Usable power supply unit: VX-200PS 24 V DC (operational range: 20 V – 40 V DC) 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	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
Audio Output Characteristic	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 (16.4 ft)
Usable Amplifier	VP-2064, VP-2122, VP-2241 or VP-2421 (VP-200VX is required for each amplifier.)
Local Audio Input	
Audio Input	2 inputs, 0 dB*, 10 kΩ, electronically-balanced, RJ45 Connector
Audio Input Characteristic	Frequency response: 20 Hz – 20 kHz Sampling frequency: 48 kHz A/D converter: 24 bit
Control Input	2 inputs, no-voltage make contact input, open voltage: 12 V DC, short-circuit current: 2 mA, photo coupler input
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	Input: 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)
Maximum Cable Distance	Total length of analog link: 800 m (874.89 yd)

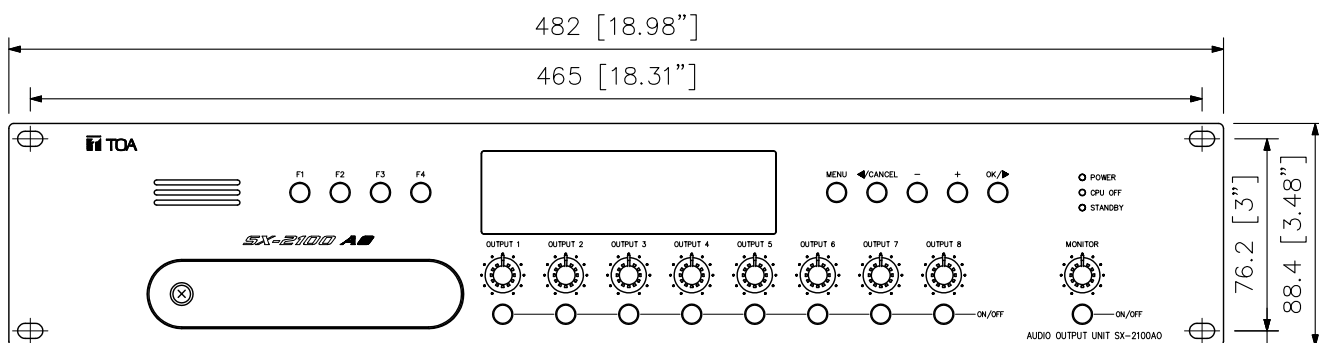
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DS Link	
Usable Unit	VX-2000DS
Connector/Cable	2 interface, RJ45 Connector, Shielded Category 5 twisted pair cable (CAT5-STP)
Maximum Cable Distance	5 m (16.4 ft)
CI/CO Link	
Usable Unit	SX-2000CI or SX-2000CO
Connector/Cable	1 interface, RJ45 Connector, 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 kΩ between the speaker line and the shield In case of open: Opened between the speaker line and the shield
Impedance	Minimum load: 2 kΩ (5 W) at 100 V line
Control Input	
Control Output	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) 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 screw ---4

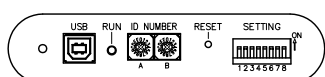
■ APPEARANCE



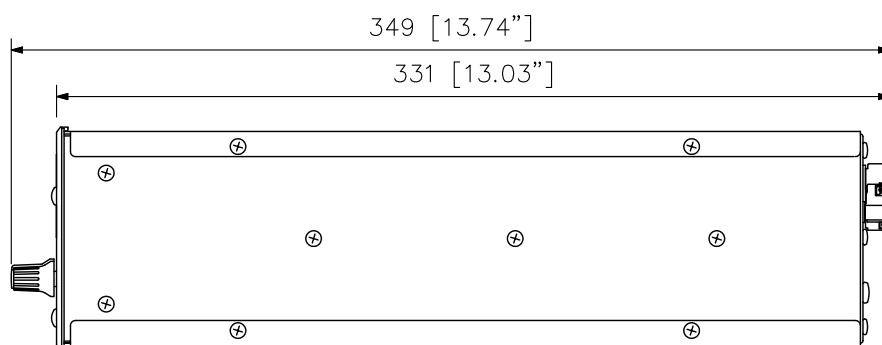
Rear View



Front View



Inside of the protective cover



Side View

UNIT:mm SCALE:1/3