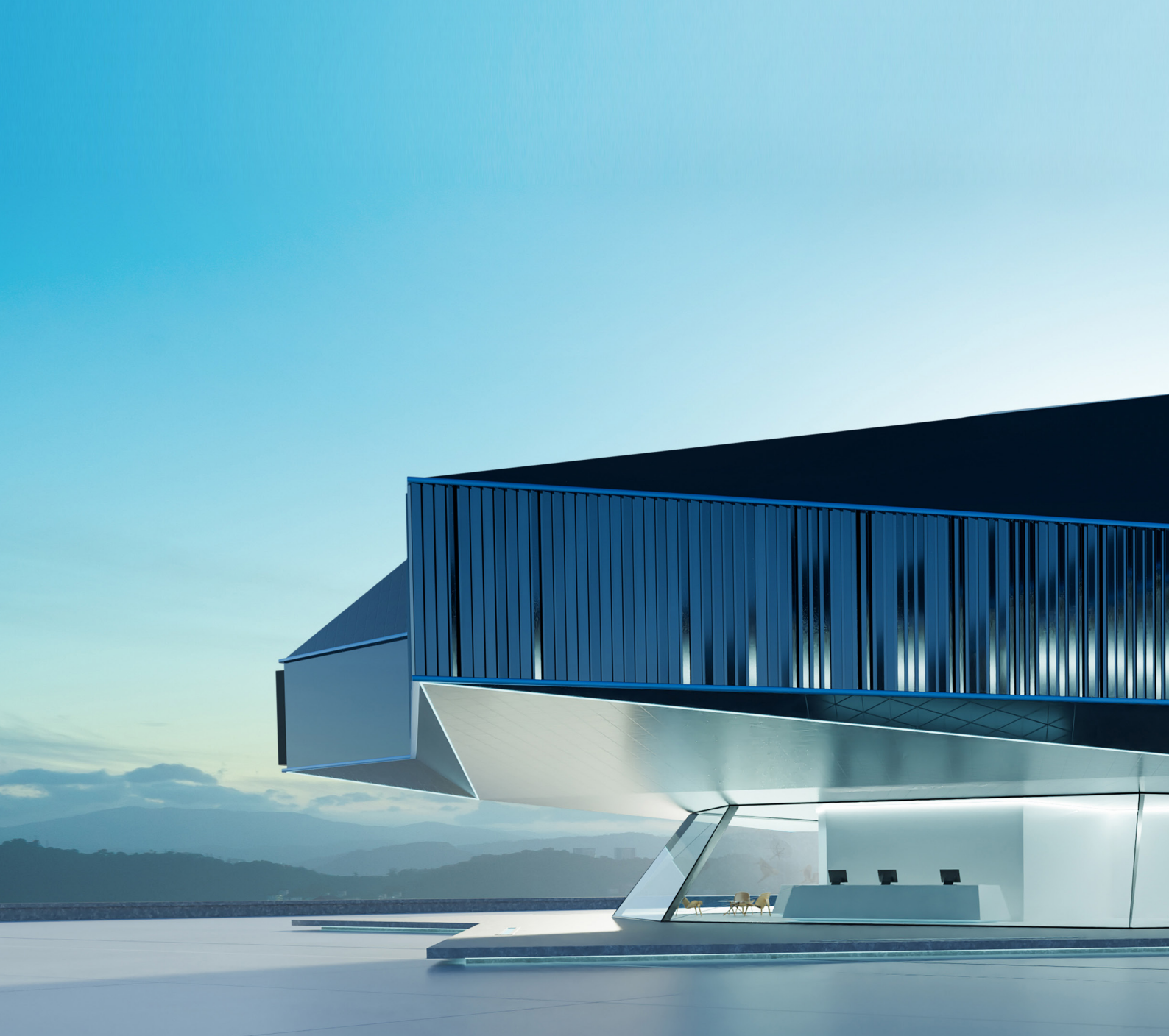
Digital Power Amplifier

DPX SERIES

1CH : DPX-300S/600S/900S/1200S
2CH : DPX-300D/600D
4CH : DPX-300Q



Digital Power Amplifier

DPX SERIES

The DPX series is an Inter-M's high-end digital PA amplifier which is equipped with various protection functions including what it can cover a user's mistake, as well as maintains the advantages of DPA amplifier, which is one of the best-selling models in Inter-M such as AC/DC power redundancy, priority input, and remote control terminal.

It is the high-performance amplifier for various situations that can occur in a field, such as reverse voltage, ground fault, output short, over-input, voltage error, overheating, etc... And the user can immediately check the status of the problem via LED and buzzer.

It is possible to prevent in advance from the problem that can occur from small spaces like stores and low floors of building to large spaces which require distributed control, such as commercial buildings and schools.

2CH : 300W ▶ DPX-300D

1CH : 300W ▶ DPX-300S

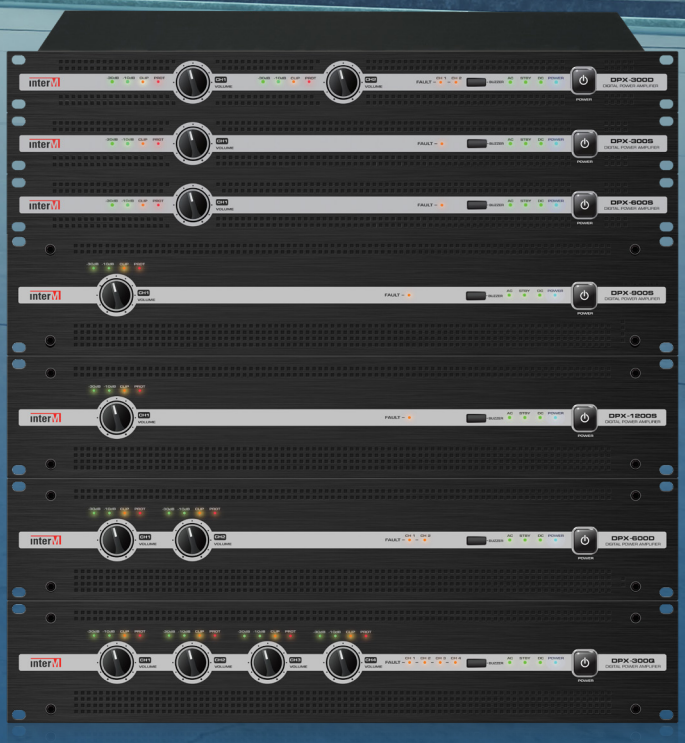
1CH : 600W ▶ DPX-600S

1CH : 900W ▶ DPX-900S

1CH : 1200W▶ DPX-1200S

2CH : 600W ▶ DPX-600D

4CH : 300W ▶ DPX-300Q



Various protective and preventive functions

Reverse Voltage

When the reverse voltage(AC) from the amplifier output line is detected in the standby mode, it blocks the amplifier's operation and delivers the problem status.

Ground Fault

When the ground fault is detected in the amplifier output line, it blocks the output and delivers the problem status.

Output Short

When the short is detected in the amplifier output line, it blocks the output from each channel and delivers the problem status.

DPX AMP

Safe and smart amplifier

LIFIER is

Over Input

When the signal is over-input(more than 10V) to the amplifier, it blocks the output via limiter circuit and delivers the problem status.

Voltage Error

The amplifier can be even protected from the severe environment via UVP (Under Voltage Protection), OVP (Over Voltage Protection) and OCP (Over Current Protection) circuit.

Overheating

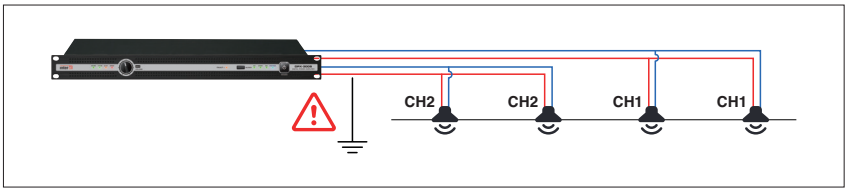
It can protect the amplifier from overheating through monitoring its temperature and controlling the speed of cooling fan.

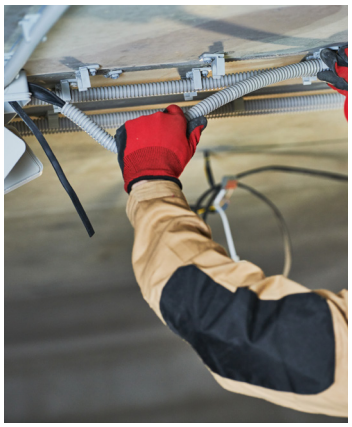
DPX AMPLIFIER is

Built-in ground fault detection

When the speaker line unintentionally has ground fault while communication work or interior work, it detects the error, delivers the problem status through LED & buzzer and blocks the amplifier's output.

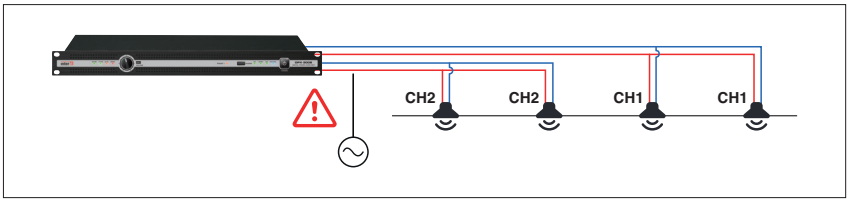
* When the ground fault occurs, the amplifier can be overloaded, which can result in malfunctioning and damages.

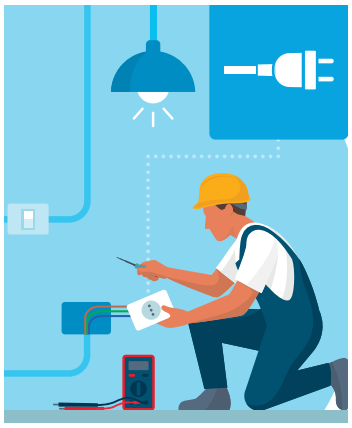




Build-in leakage of reverse voltage detection

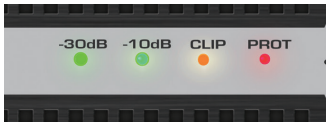
If the AC voltage is leaked to the amplifier's line while new or renovation work, there will be serious damages on the amplifier and whole system. When the amplifier is powered off and AC voltage more than 10V is applied to the speaker line, it delivers the problem status via LED & buzzer, stop the operation and protect the amplifier and system.





Motion display LED and buzzer available on intuitively checking the status

The LED placed in front of the equipment can show the status of AC/DC power and audio signal input in the equipment. When there's a problem, it can immediately check and handle it through LED and buzzer.

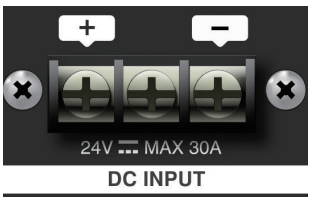


Compact Digital Amplifier playing the clear and delicate sound

The 1U size of compact digital amplifier can make clear and delicate sound without any noise through high S/N and low THD. So, it is very suitable for playing BGM, which has been importantly considered in the PA system recently, and it is good for use in large franchise stores such as shopping malls, department stores, banks, etc...

Perfect response on emergency PA system under power redundancy design

As the AC/DC power is redundantly designed, it is available to supply DC 24V through the battery even though there is any fault from AC power due to power outage. The DC power is an emergency one, so it operates regardless of whether the power switch is ON / OFF. Also, when AC power is normally restored during DC power operation, it is automatically switched to AC power and operated.

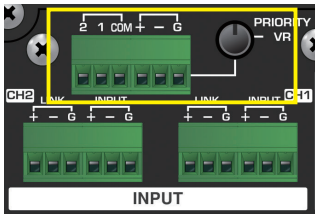


DC INPUT

[Normal] [When AC power is cut off]

Emergency broadcasting function through priority input

The priority function can be configured to automatically output the alarm in case of an emergency. When contact is input to the priority terminal of the rear panel, the audio signal input with the priority terminal can be output before the channel input.



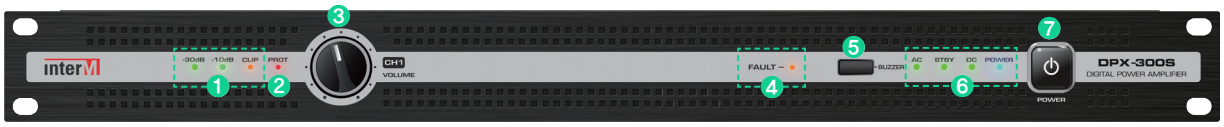
Remote power control

The power of equipment can be remotely controlled through the remote terminal of the rear panel. The equipment is powered on when there is a contact input to the remote terminal under standby mode.

1F Control Center

DPX SERIES

Front Panel



1CH

2CH

4CH

1 INPUT LEVEL INDICATOR LED
This LED indicates the level of the audio signal input to the device.

2 AMP PROTECTION LED
This LED indicates the operation status of the amplifier's protection circuit. When the LED is on, the output is cut off.

3 VOLUME CONTROL
A volume that adjusts the signal input size. Turning it clockwise increases the volume, and turning it counterclockwise decreases the volume.

4 FAULT LED
Fault LED is on when the LINE of the amplifier output is abnormal.
(Reverse voltage/short : LED on, EARTH FAULT : LED Flash)

5 BUZZER ON/OFF SWITCH
A buzzer sounds when the amplifier output's LINE is abnormal. ON/OFF can be controlled with this switch. When the switch is ON, the buzzer sounds, and when the switch is OFF, the buzzer does not sound.

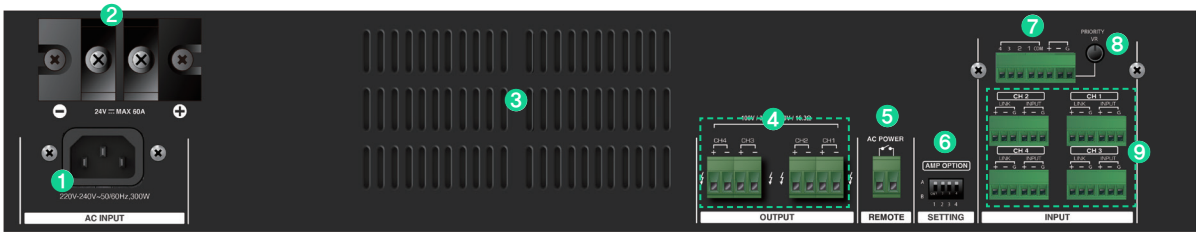
6 POWER STATUS LED
This LED indicates the device's power status.

7 POWER SWITCH
When the switch is pressed, the "POWER LED" is on and the device turns on.

Rear Panel

1CH

2CH



4CH

1 AC POWER INPUT TERMINAL
This is the AC power cord connector that supplies power to this device.

2 DC POWER INPUT TERMINAL
This is the terminal for connecting the emergency broadcast battery (DC 24V). When there is no AC power connected to the device, the device will run on the connected spare battery power.

3 FAN VENTS
Air circulation passages to prevent overheating of the device.

4 SPEAKER OUTPUT TERMINAL
This is the speaker output terminal.

5 AC POWER REMOTE
It is a terminal that can turn on/off the power from a long distance using the contact point of this terminal.

6 SETTING SWITCH
It is a switch that sets the operation of the device.

7 PRIORITY INPUT TERMINAL
It is a PRIORITY input terminal and consists of a balanced input and a contact input terminal. When connecting the PRIORITY contact, the PRIORITY audio input takes priority over the input signal of each channel.

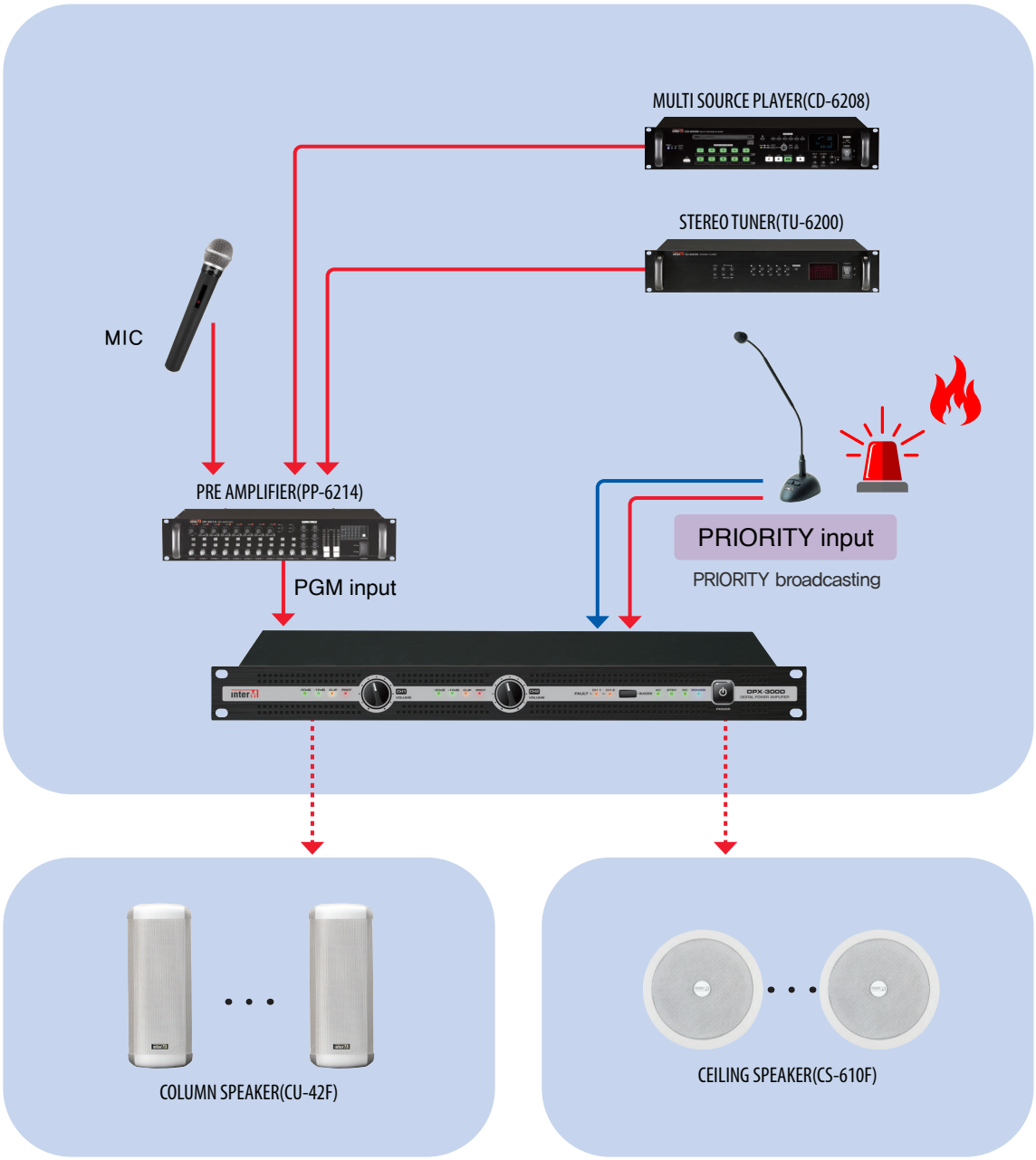
8 PRIORITY VR
The volume of the PRIORITY INPUT signal can be used to adjust the size of the output signal. Turning it clockwise increases the output, turning it counterclockwise decreases the output.

9 AUDIO INPUT TERMINAL
This is the audio signal input terminal connected to the amplifier.

Application

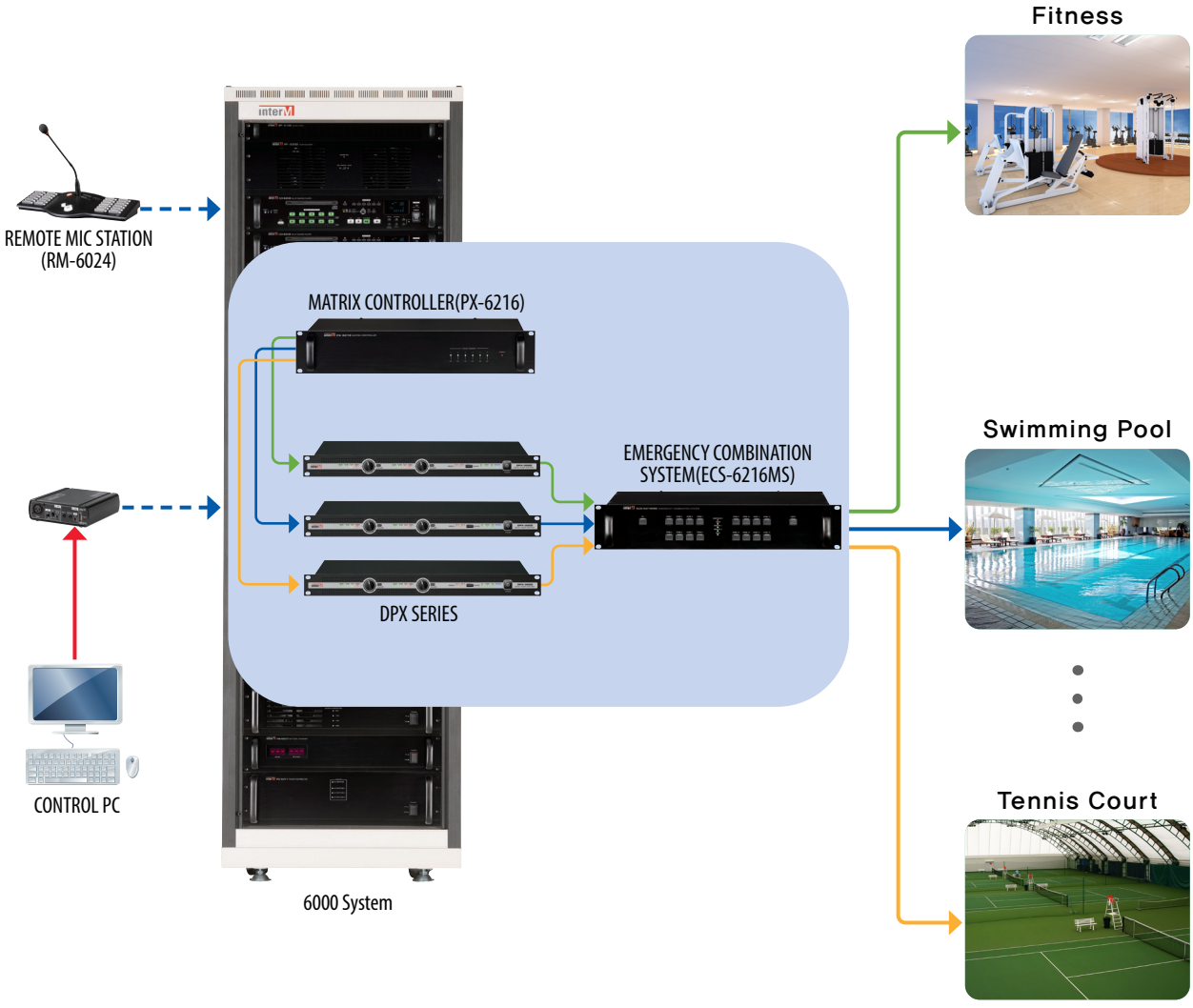
Small building_ Store, Commercial building

The broadcasting system can be easily configured with DPX series in small buildings such as the store, commercial building and etc. It is possible to high-quality broadcasting by transmitting announcements, notices, and BGM with a long distance.



Large building_ Culture center, Department store, Multiplex

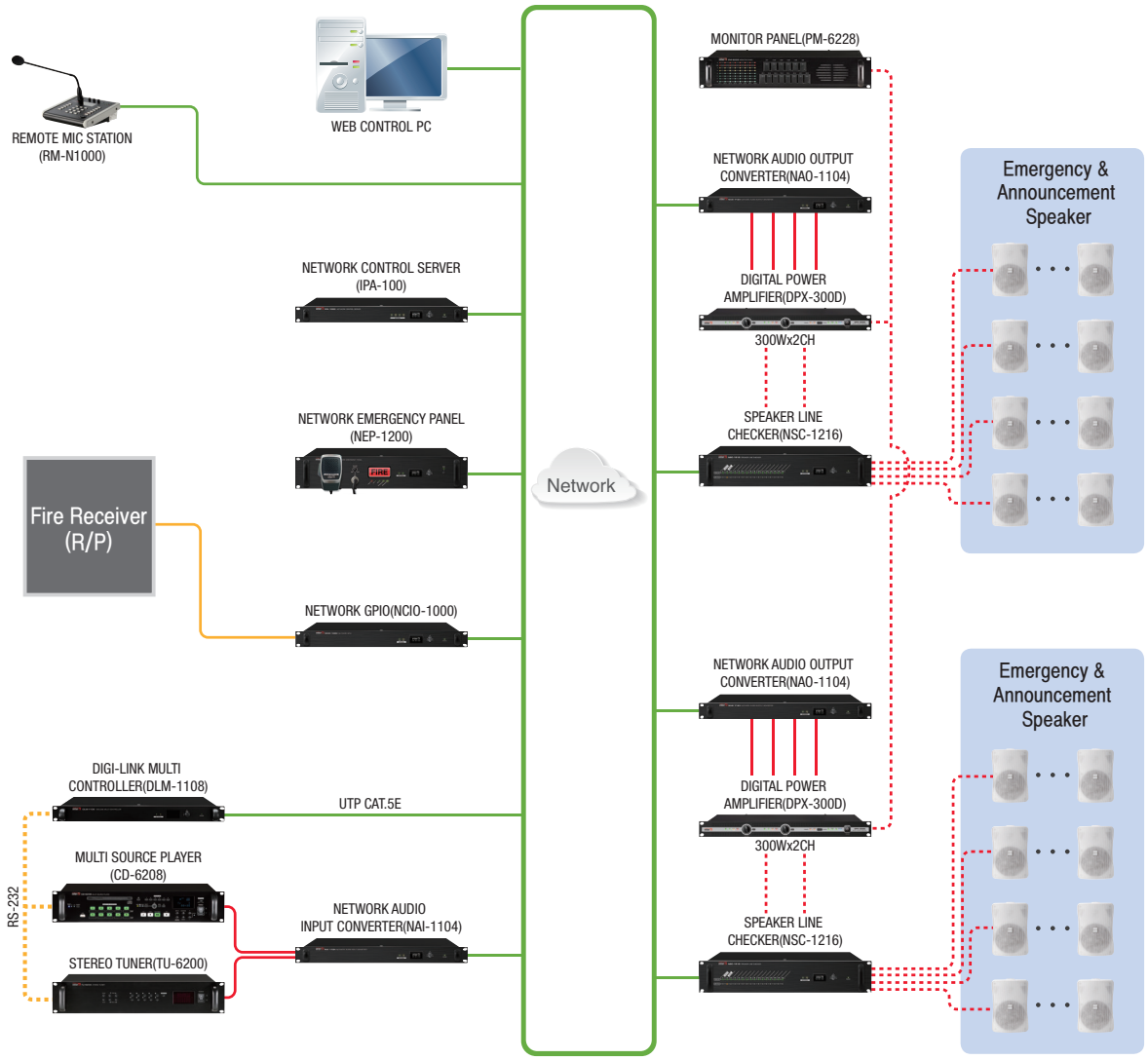
In conjunction with the 6000 system, the DPX series can be applied to large buildings such as culture center, department stores, and multiplex, which require individual broadcasting in each space and whole integrated broadcasting and control. Throughout the building, the integrated broadcasting and control like voice, BGM, and emergency is available by 6000 system installed in the emergency room. And up to 16 different sound sources can be transmitted as 8 bus broadcasts to each selected zone.



Application

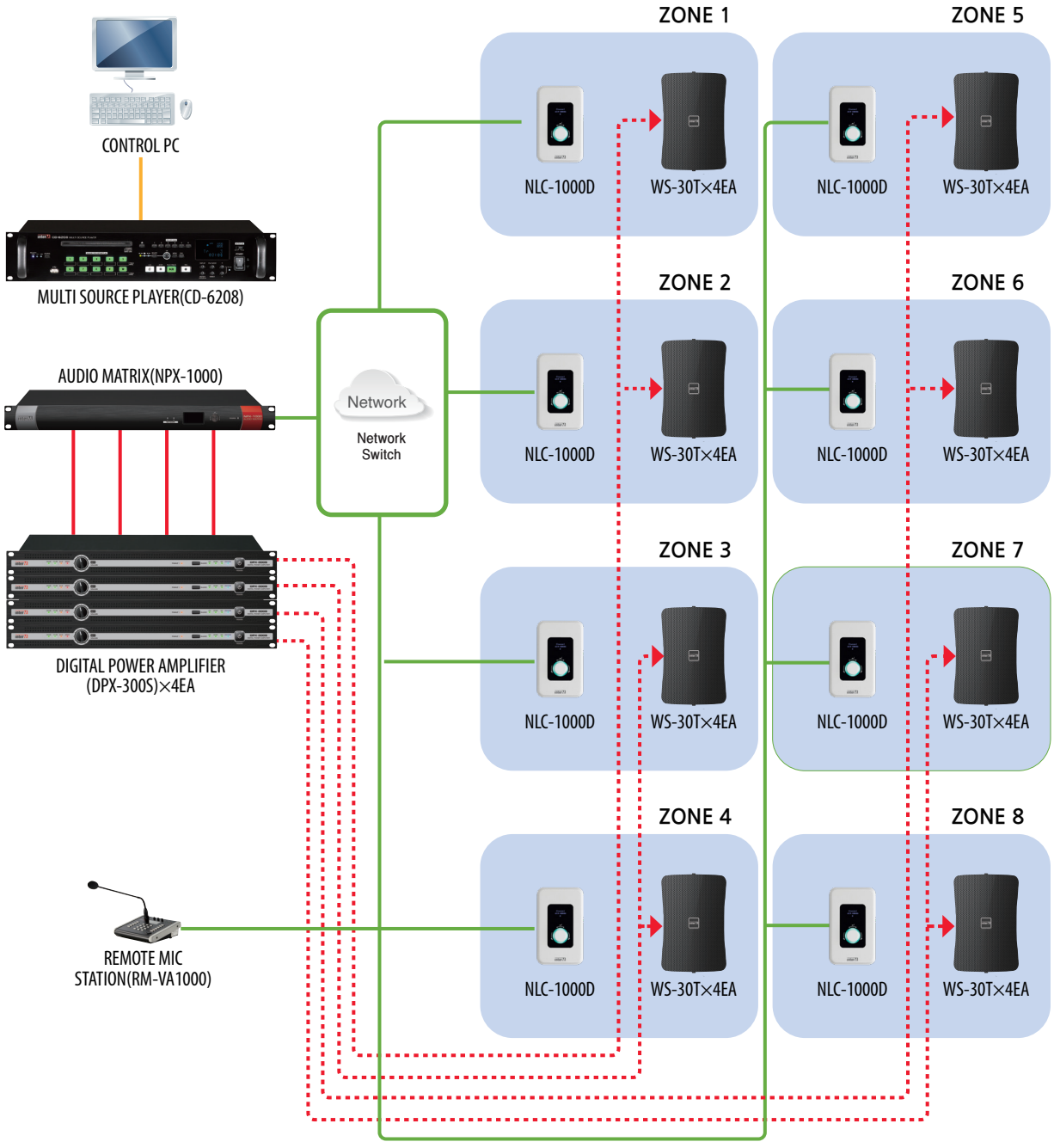
Use in spaces such as school and small training center

In the case of a school or training center where multi-channel broadcasting is necessary, it has been operated with 8 channel system so far. However, it is difficult to accommodate on-site demands with the current 8 channel system in case of integrated operating school under establishment. IPA system is available for broadcasting with more than 10 channels, which is possible to configure a smooth multi-channel broadcasting system using a DPX series amplifier. Also, DPX amplifier with protection function helps to operate the stable broadcasting.



When the distributed control per each space is necessary

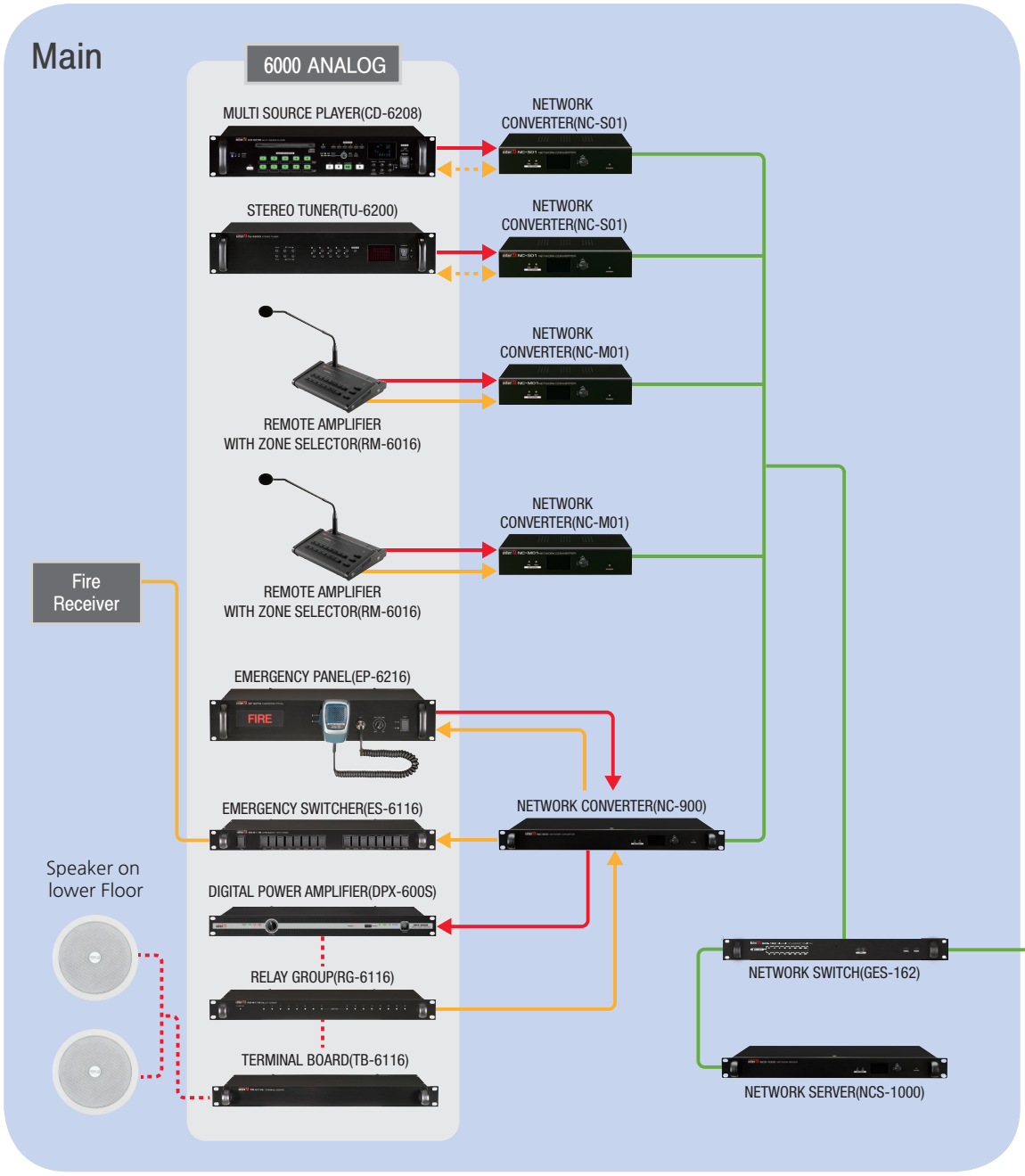
Suppose different sources or messages should be transmitted to each space, such as schools or shopping malls. In that case, the distributed control system can be configured using the audio matrix, NPX, and DPX series. The matrix, volume and DSP can be easily controlled through the integrated control program. Also, the user can select the source on the site and control the audio input and volume by using a wall-mounted controller installed on each space.

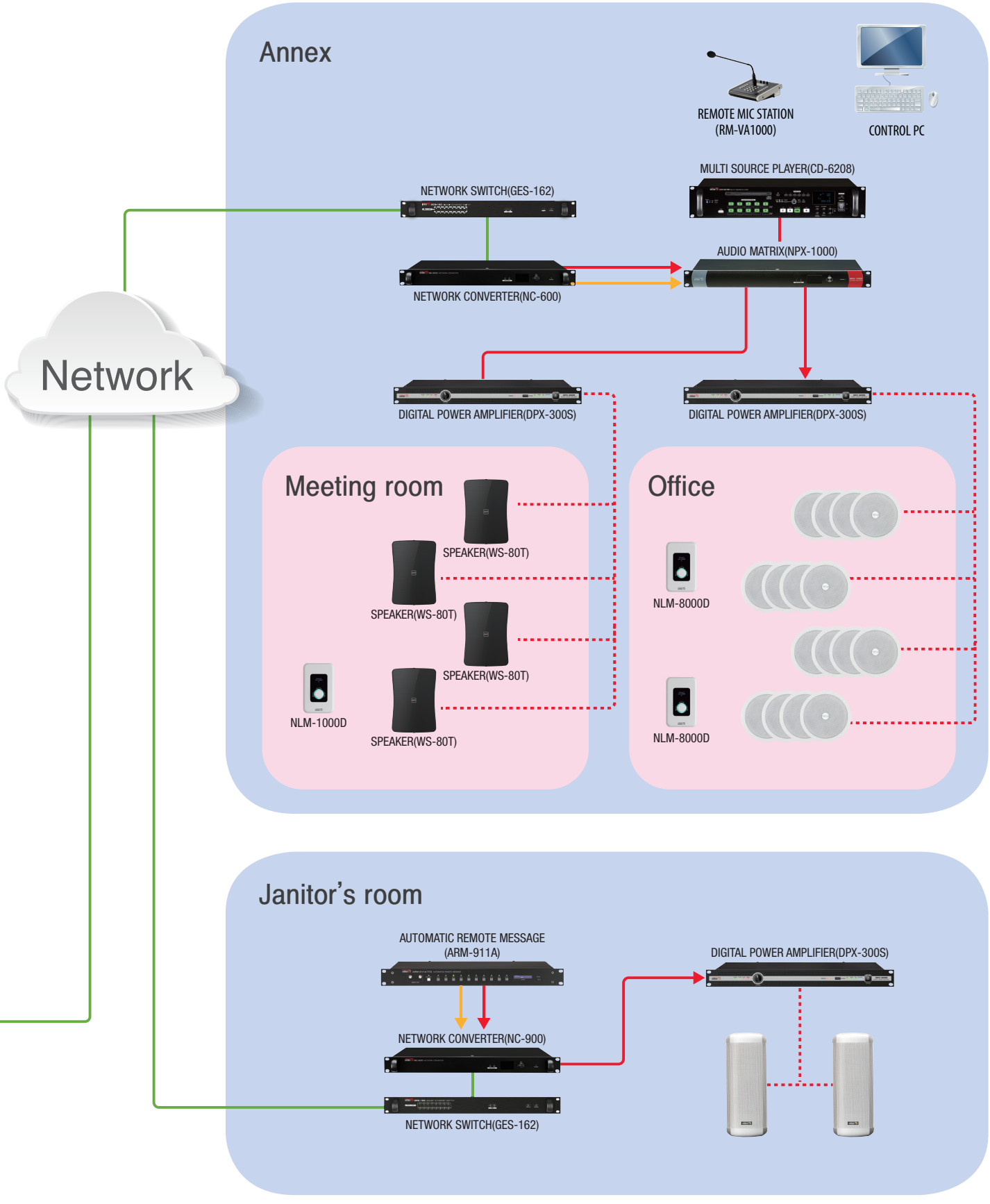


Application

When it is necessary to extend a building and do integrated control or broadcast to the annex with long-distance

Suppose it is necessary to control the broadcasting system installed in each area or transmit the broadcasting to the long-distance site or different buildings. In that case, the integrated control system can be easily configured through DPX series and network converter. Also, the GUI can synthetically control the long distant, separated spaces such as the main building, annex, and security office. The various event messages can be transmitted from security office to annex & main building via ARM-911A and the broadcasting from main building can be transmitted to the annex.



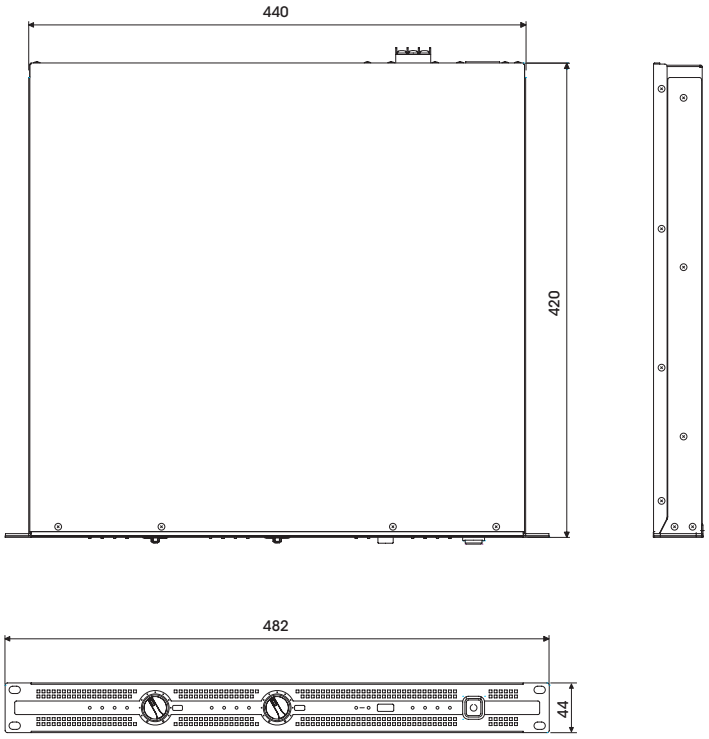

Annex
REMOTE MIC STATION
(RM-VA1000)
CONTROL PC
MULTI SOURCE PLAYER(CD-6208)
NETWORK SWITCH(GES-162)
AUDIO MATRIX(NPX-1000)
NETWORK CONVERTER(NC-600)
Network
DIGITAL POWER AMPLIFIER(DPX-300S)
DIGITAL POWER AMPLIFIER(DPX-300S)
Meeting room
SPEAKER(WS-80T)
SPEAKER(WS-80T)
SPEAKER(WS-80T)
NLM-1000D
SPEAKER(WS-80T)
Office
NLM-8000D
NLM-8000D
Janitor's room
AUTOMATIC REMOTE MESSAGE
(ARM-911A)
DIGITAL POWER AMPLIFIER(DPX-300S)
NETWORK CONVERTER(NC-900)
NETWORK SWITCH(GES-162)

Specification

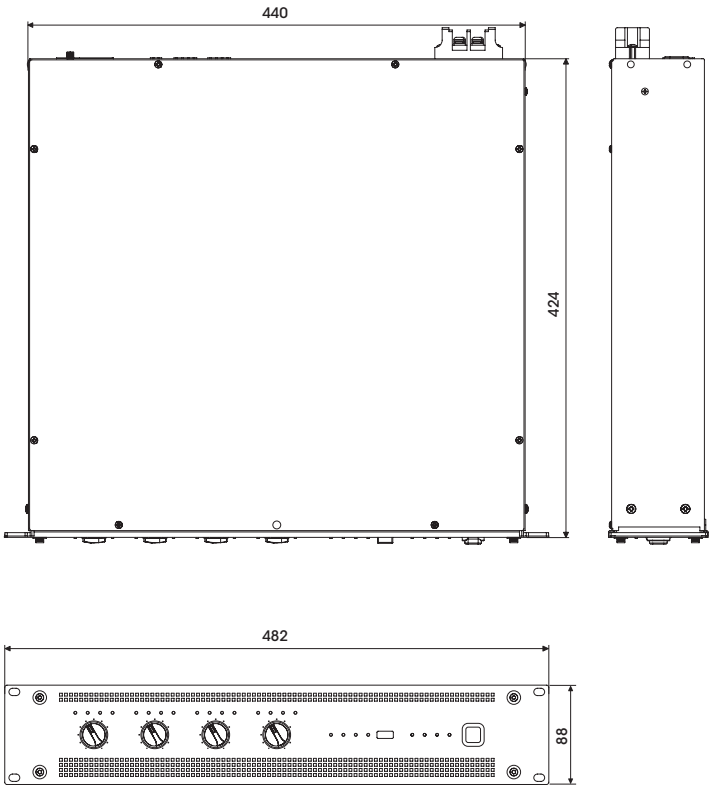
	DPX-300S	DPX-300D	DPX-600S	DPX-300Q	DPX-600D	DPX-900S	DPX-1200S
Rated Power (70V / 100V)	300W x 1CH	300W x 2CH	600W x 1CH	300W x 4CH	600W x 2CH	900W x 1CH	1200W x 1CH
Frequency Response (1W, ±3dB)	50Hz ~ 20kHz						
THD (Rated Power)	Less than 1%						
Signal to Noise (20kHz LPF, A-wtd)	More than 95dB						
Input Sensitivity / Impedance	0dBV / 20kΩ						
Ouput Voltage / Impedance	100V / 33.3Ω	100V / 33.3Ω	100V / 16.6Ω	100V/ 33.3Ω	100V/ 16.6Ω	100V/ 11.1Ω	100V/ 8.3Ω
	70V / 16.3Ω	70V / 16.3Ω	70V / 8.1Ω	70V/ 16.3Ω	70V/ 8.1Ω	70V/ 5.4Ω	70V/ 4.1Ω
Operating Temperature	-10℃ ~ +40℃						
Operating Power	AC 220~240V, 50/60 Hz / DC 24V						
Power Consumption (1/8 Power)	150W			300W			
Weight (Set)	7.3kg	7.5kg	7.3kg	9.62kg	9.34kg	9.1kg	9.1kg
Dimensions (Set)	482(W) x 44(H) x 420(D) mm			482(W) x 88(H) x 424(D) mm			

Drawing

1U Size



2U Size



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