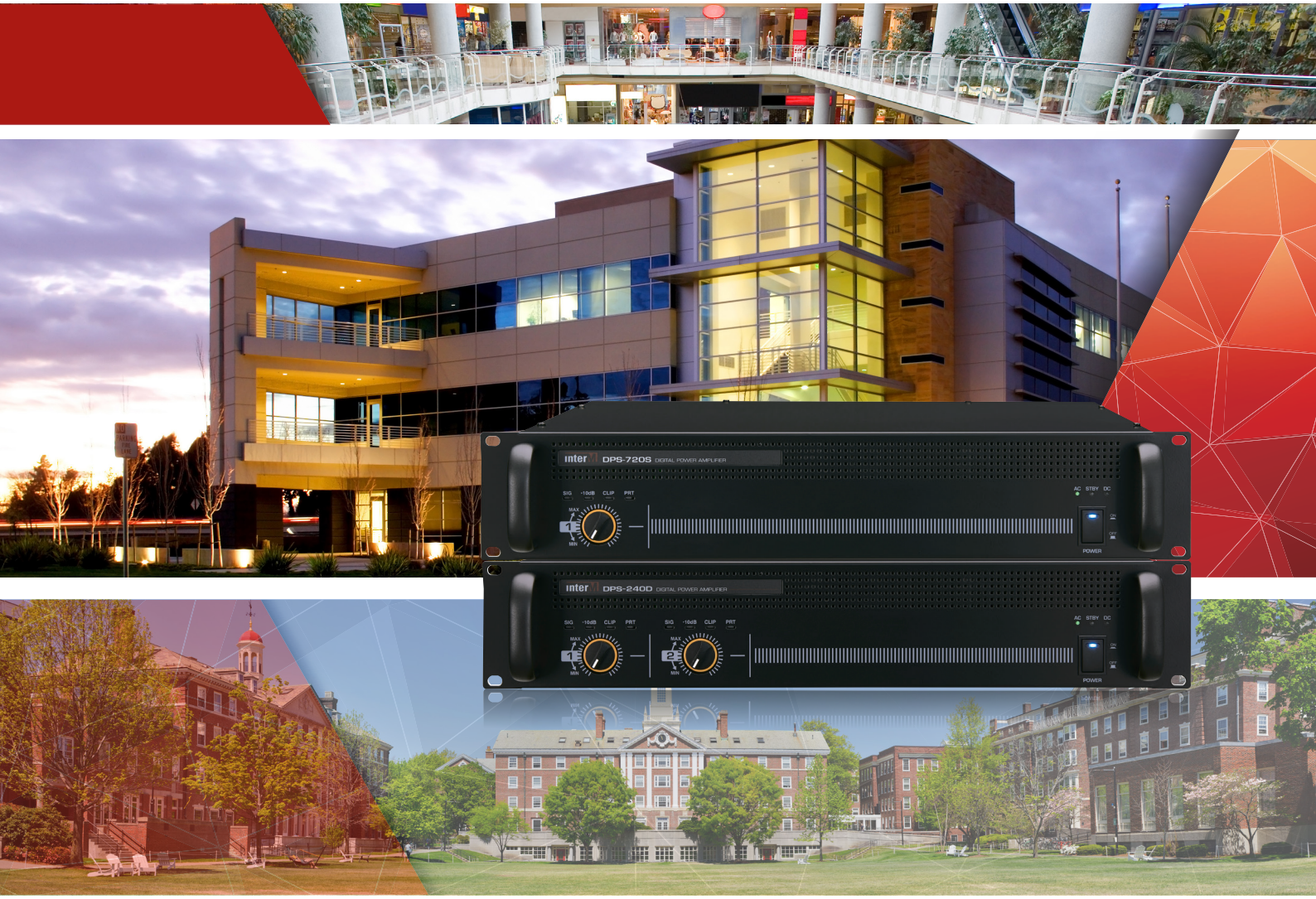
Digital Power Amplifier

DPS SERIES

DPS-240S/360S/480S/720S
DPS-240D/360D/480D



interM

Digital Power Amplifier

DPS SERIES

DPS-240S/360S/480S/720S
DPS-240D/360D/480D

Wider and more rational choice, New standards for digital PA amplifiers

In order to operate the amplifier stably, the line construction company calculated the margin and selected a product with higher output than necessary.
We have developed the digital DPS series to reflect the market for such speaker installation. The DPS can basically have a margin above the output of the actual specification. If the output is within the allowable range, it is durable enough to provide more efficient and economical operation management.

In addition, the DPS series has a lower output range than the conventional analog amplifier line-up, making it more versatile. It has a dual channel amplifier line-up, so it can maximize the efficiency of digital power amplifiers in various sizes ranging from schools, department stores, public institutions, large-scale residential complexes and research complexes that require public address system to realize high quality broadcasting system.

DPS SERIES FOR ENVIRONMENT

[Business building]

There are two ways to install the amplifier when it is necessary to diversify broadcasting by region.
Each channel (floor, area, etc.) should be installed with one channel of amplifiers, or more than two channels of multi-channel amplifiers should be installed and installed separately.
In case that all broadcasting lines are connected by one amplifier, if there is a problem in the speaker line, it is difficult to operate the broadcasting system smoothly because it affects the whole floor and all areas.
Therefore, in order to operate an efficient and safe broadcasting system, it is necessary to separate the channels for each line and install the amplifier. In case of emergency such as fire, we would like to design a safe and reliable emergency broadcasting system so that it does not affect other floors or areas.

DPA–000xx

Ouput Channel

DPS–000xx

- 1CH: 240W / 300W / 360W / 600W / 720W / 900W / 1200W (7 types)
  ▶ DPS–240S / 360S / 480S / 720S , DPA–300S / 600S / 900S / 1200S
- 2CH: 240W / 300W / 360W / 480W / 600W (5 types)
  ▶ DPA–300D / 600D , DPS–240D / 360D / 480D
- 3CH: 300W (1 type) ▶ DPA–300T
- 4CH: 150W / 300W (2 types) ▶ DPA–150Q / 300Q
- 8CH: 50W (1 type) ▶ DPA–50E

Overview

The DPS series has the most commonly used channels (1CH, 2CH) and various output line-ups (240 /360 / 480 / 720W) on the market. Depending on the size of the space in which the amplifier is installed, the number of sound sources required, the diversity, and the configuration of the line, you can select various channels and outputs of the digital amplifier.

- We recommend DPS-240S(1CH) and DPS-240D (2CH) for space or small space where parts requiring a small output digital amplifier are needed.

- We recommend the DPS-360D(1CH) and DPS-360D(2CH) for the public areas that require public address systems, such as medium-sized office and educational facilities.

- We recommend 480W of DPS-480S(1CH) and DPS-480D(2CH), which have a generous output, in the same space as the lobby where a high quality BGM broadcasting system is required. In addition, We recommend 2Way coaxial speaker CS-660MH which can reproduce high quality music.

- If you need to broadcast over a large area like underground parking lot with one sound source, 1CH digital power amplifier DPS-720S is suitable. If you use the CU series, which can deliver clear announcement in a large space, the speaker will be able to enhance the sound quality even further.

FEATURES

Various line-up by output

The DPS series boasts stable operation by implementing low-power PA amplifier functions. It consists of two channels (1CH and 2CH), which are most widely used in the market, and can be installed in various places with various output digital power amplifier line-up. We improved the appearance of the product and applied modern design to the existing public hall broadcasting equipment.

240W 360W 480W 720W

Efficient and rational digital amplifier

[Analog]

Analog Amplifier
240W × 2

[Digital]

DPS-240D Digital Amplifier
240W

Inter-M's digital amplifiers can achieve high output with surprisingly low power consumption compared to conventional analog amplifiers, with low heat output and light weight, thus enabling an economical and environmentally friendly system.

100V / 70V selectable via switch

The OPTLESS design allows high-Z output to be implemented, allowing 100V / 70V output to be selected via the switch on each channel.

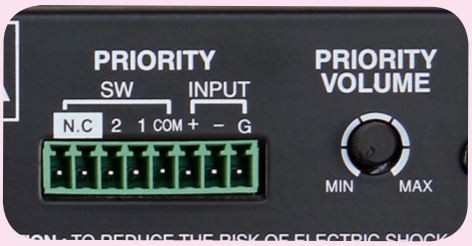
Perfect support for DC 24V power supply for emergency broadcasting

The DPS series is designed with an AC / DC dual power supply that allows DC 24V supply through the battery even if AC power fails due to power outage. Since the DC power supply is an emergency power supply, it operates regardless of whether the power switch is ON or OFF. Also, when AC power is restored normally during DC power operation, it is automatically switched to AC power and driven.

〈Normal〉 〈When AC power is cut off〉

Emergency broadcast can be played through priority input

With the Priority function of the DPS series, alarm broadcasts can be configured to be output automatically in an emergency. When a contact is input to the PRIORITY terminal on the rear, the signal input to the PRIORITY terminal is output prior to the PGM input.



FEATURES

◆ High S/N, low THD for fine, clear sound reproduction

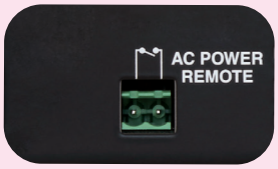
The DPS series is a high quality commercial amplifier that can reproduce crisp, detailed sound without noise with high S/N of over 100dB and low THD of less than 0.1%. Therefore, it is very suitable for BGM playback , which is considered to be important in PA system recently , and is useful in large -scale franchise stores such as shopping malls, department stores, banks, and the like.

※ S/N : This is a value that indicates Signal to Noise. The higher the value, the less noise can be reproduced.
※ THD : Abbreviation for Total Harmonics Distortion. The higher the value, the more distortion can be reproduced.

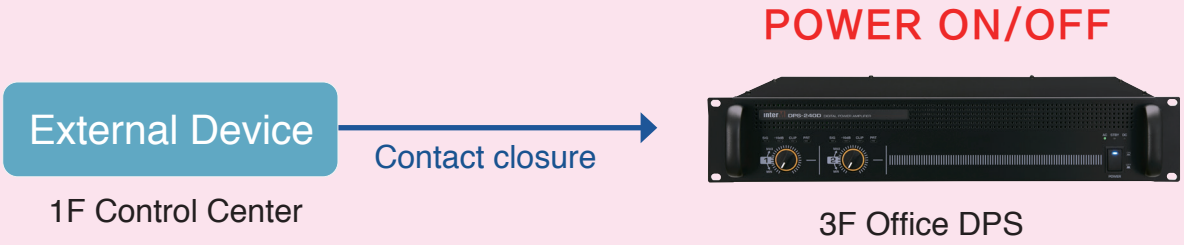
◆ Operation indicator LED to check status at a glance

SIG, -10dB output level, Clip, Protect, etc., can be intuitively monitored through LED lighting status and color by AC / DC power supply, STBY status, and each channel.
In addition, through the volume of each channel on the front of the product, independent volume can be adjusted for each channel.

AC REMOTE that can turn on / off the power remotely



Using the AC REMOTE terminal on the back of the device, you can turn the power of the DPA series ON / OFF at a long distance. When the DPA series is OFF, the power is turned on when the contact is input to the AC REMOTE terminal.



Excellent protection with protection circuit

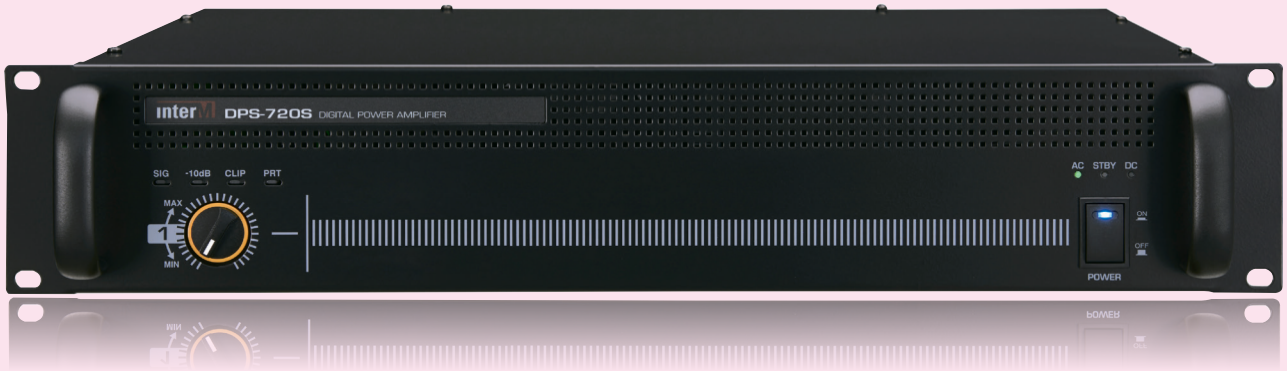
The DPS series is equipped with various protection circuits such as OVP (Over -Voltage Protection), UVP (Under-Voltage Protection),Limiter and OCP(Over-Current Protection) to detect and block I / O voltage higher or lower than the specified voltage range. This allows you to safeguard your device in extreme situations to prevent failures.

※ Caution: Please check the impedance of the speaker line prior to use.

1CH DPS LINE-UP

Digital Power Amplifier

DPS-240S/360S/480S/720S

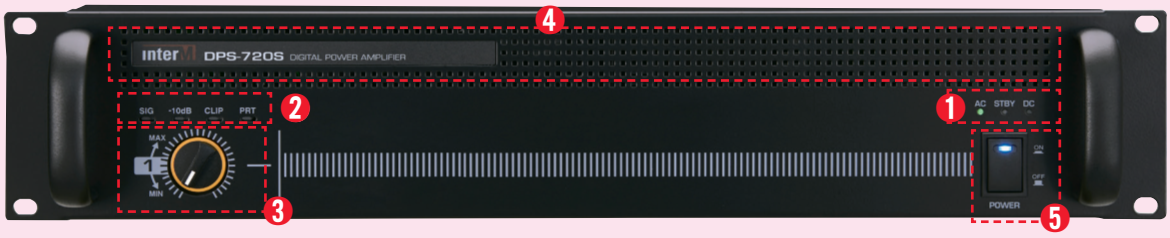


One source space broadcasting with one sound source

It is a single-channel amplifier for connecting a single amplifier per line.

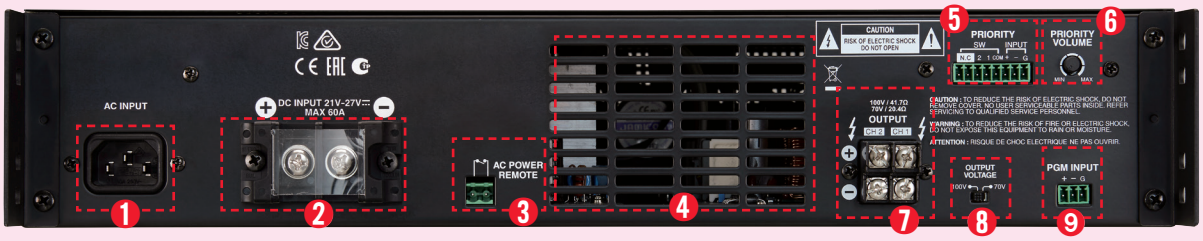
	DPS-240S	DPS-360S	DPS-480S	DPS-720S
Rated Power	240W	360W	480W	720W
Ouput Voltage/ Impedance	100V/41.7Ω	100V/27.8Ω	100V/20.8Ω	100V/13.9Ω
	70V/20.4Ω	70V/13.6Ω	70V/10.2Ω	70V/6.8Ω
Input Sensitivity	1V/10kΩ			
THD (AES17,1/8 Power)	Less than 0.5%			
Signal to Noise (20kHz LPF)	More than 100dB			
Frequency Response (1W, ±3dB)	60Hz~20kHz			
Operating Temperature	−10℃~40℃			
Operating Power	AC 220−240V,50/60Hz, DC 24V			
Power Consumption	130W			250W
Weight (Set)	6.9kg			7.96kg
Dimensions (Set)	482(W) × 88(H) × 371(D)mm			482(W) × 88(H) × 424(D)mm

◆ FRONT PANEL



1. AC, STBY, DC LED
2. Signal Output level Indicator
3. Volume control volume
4. Vents
5. Power switch

◆ REAR PANEL

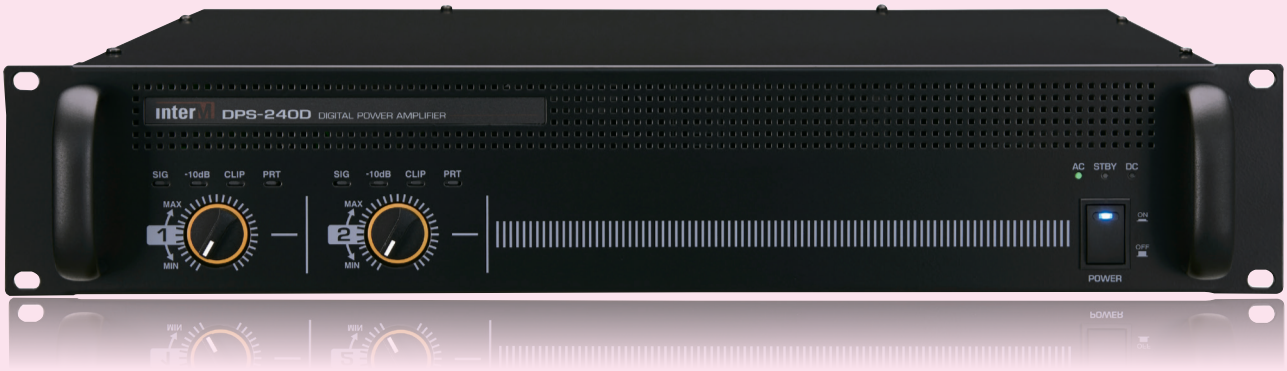


1. AC power terminal
2. DC power terminal
3. AC power remote terminal
4. FAN Vents
5. Priority input and contact terminal
6. Priority volume control
7. Output terminal
8. Output voltage selector switch
9. PGM input terminal

2CH DPS LINE-UP

Digital Power Amplifier

DPS-240D/360D/480D

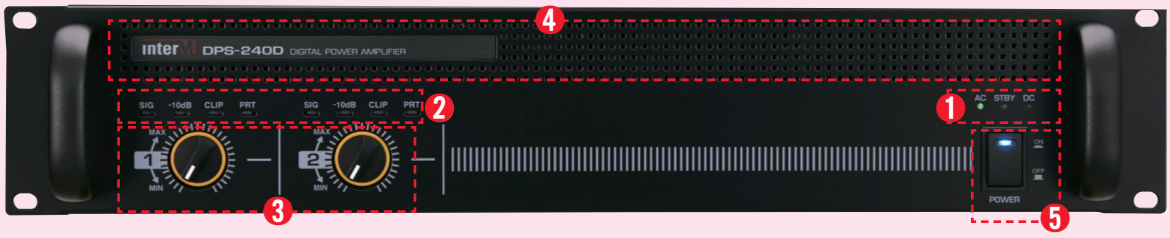


A space where multiple music sources are needed for multiple broadcasting

It is a dual channel amplifier for space that consists of connecting one channel per one line.

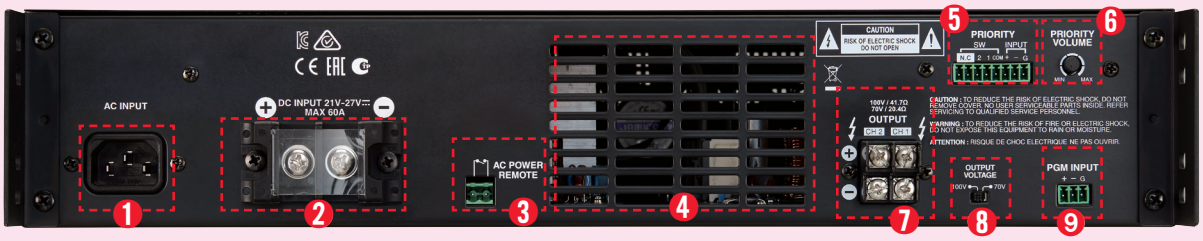
	DPS-240D	DPS-360D	DPS-480D
Rated Power	240W × 2	360W × 2	480W × 2
Ouput Voltage/ Impedance	100V/41.6Ω	100V/27.7Ω	100V/20.8Ω
	70V/20.42Ω	70V/13.6Ω	70V/10.2Ω
Input Sensitivity	1V/10kΩ		
THD (AES17,1/8 Power)	Less than 0.5%		
Signal to Noise (20kHz LPF)	More than 100dB		
Frequency Response (1W, ±3dB)	60Hz~20kHz		
Operating Temperature	−10℃~40℃		
Operating Power	AC 220−240V,50/60Hz, DC 24V		
Power Consumption	130W	250W	
Weight (Set)	7.4kg	8.25kg	8.23kg
Dimensions (Set)	482(W) × 88(H) × 371(D)mm	482(W) × 88(H) × 424(D)mm	

◆ FRONT PANEL



1. AC, STBY, DC LED
2. Signal Output level Indicator
3. Volume control volume
4. Vents
5. Power switch

◆ REAR PANEL



1. AC power terminal
2. DC power terminal
3. AC power remote terminal
4. FAN Vents
5. Priority input and contact terminal
6. Priority volume control
7. Output terminal
8. Output voltage selector switch
9. PGM input terminal

APPLICATION 1

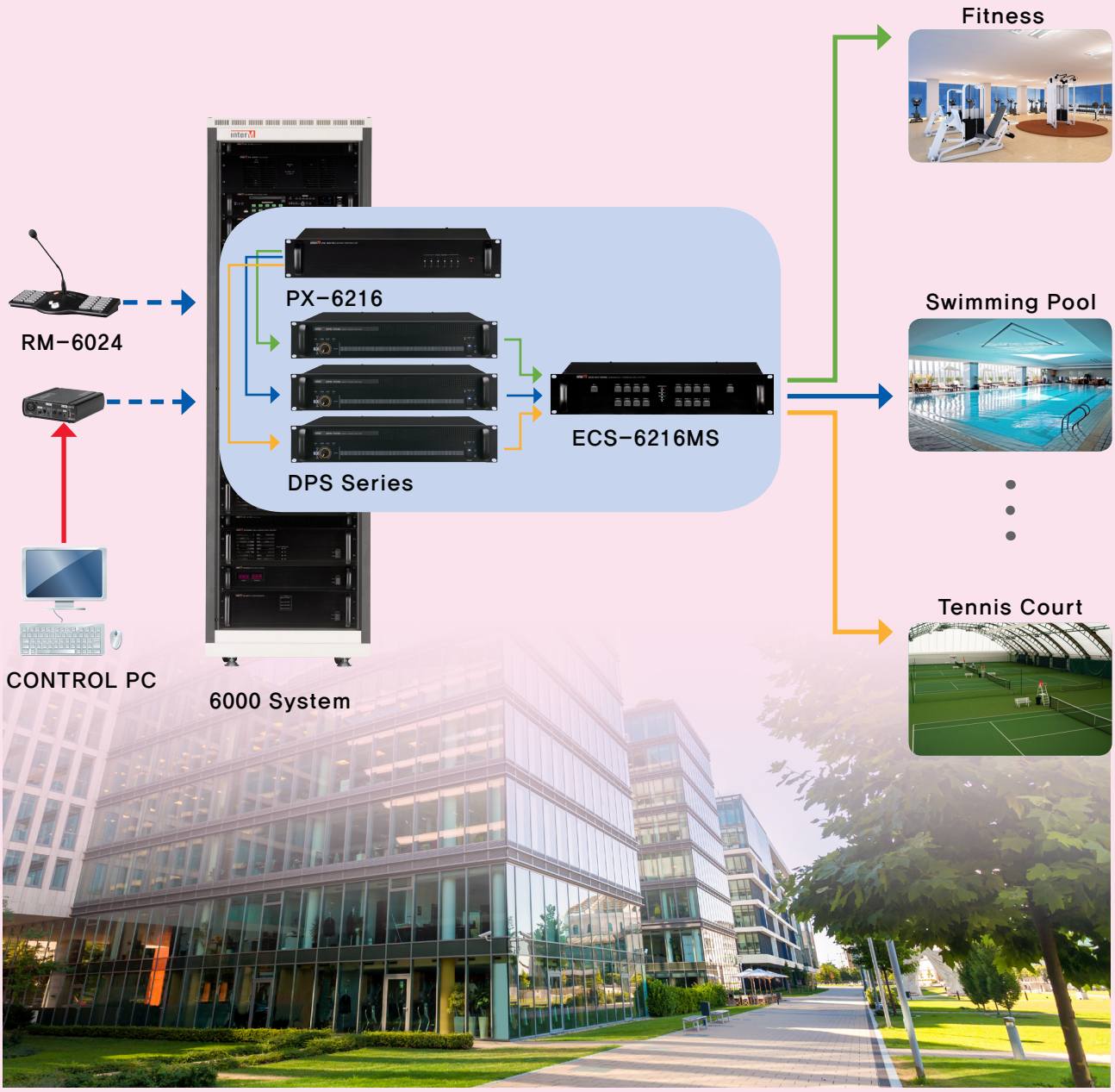
When used in small buildings such as shops, business buildings, etc.

DPS series can easily configure broadcasting system in small buildings such as shops, business buildings. Guidance, announcement, and BGM can be transmitted remotely, enabling high quality broadcasting. In addition, emergency function can be used in case of emergency such as fire by using priority function.

APPLICATION 2

When used in large buildings such as cultural centers, department stores, multiplexes, etc.

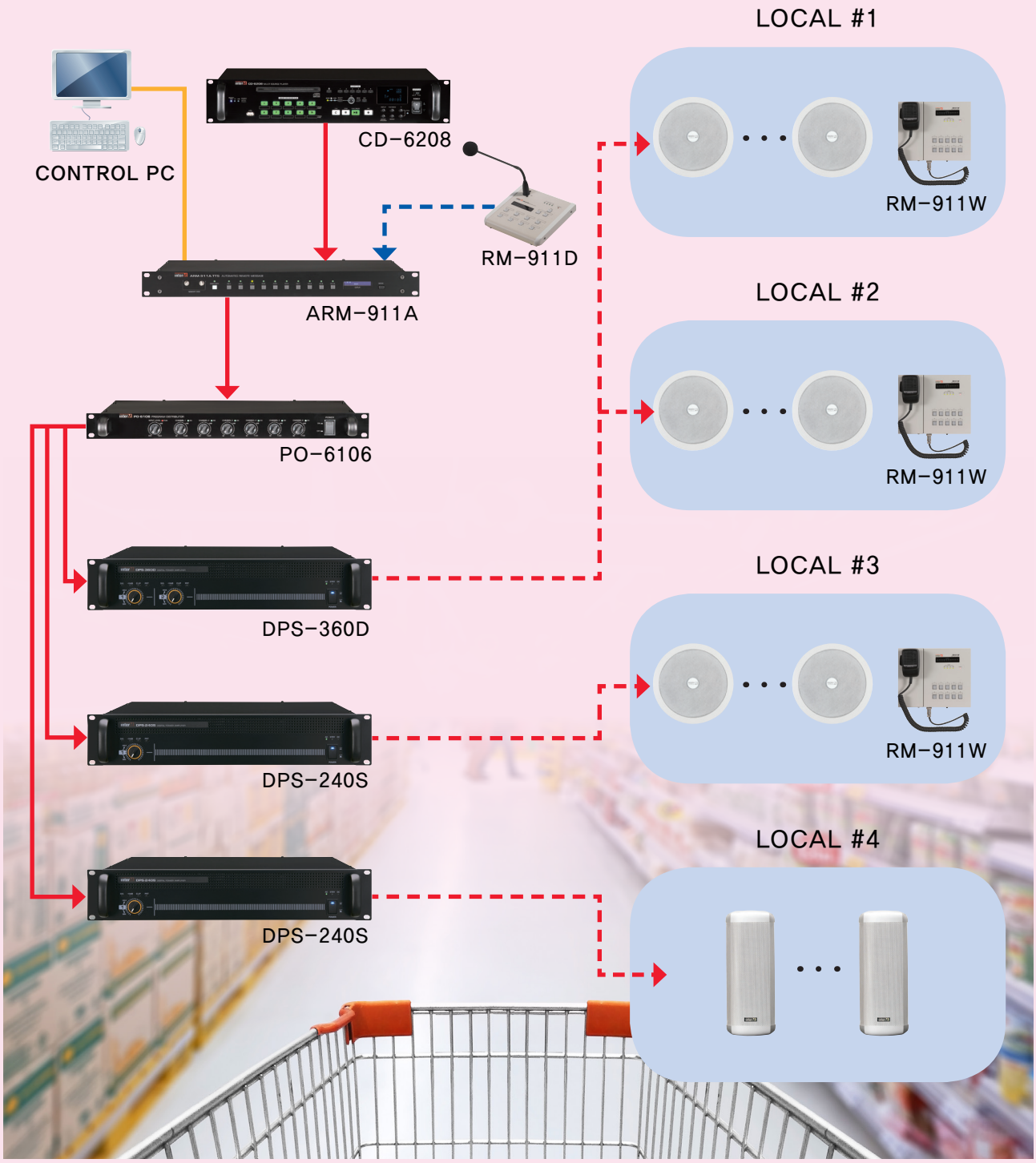
6000 system, it is possible to apply broadcasting system using DPS series to large-scale buildings such as cultural centers, department stores, multiplexes, etc., which require not only complete integrated broadcasting and control but also individual broadcasting for each space.
Integrated broadcasting and control of voice, BGM, Emergency, etc. can be performed throughout the building in the 6000 system installed in the disaster prevention room. In addition, the 16 × 8 audio matrix PX-6216 and relay group and speaker selector ECS-6216MS can be used to selectively send the sound source to each region.



APPLICATION 3

When it is necessary to broadcast in response to various events.

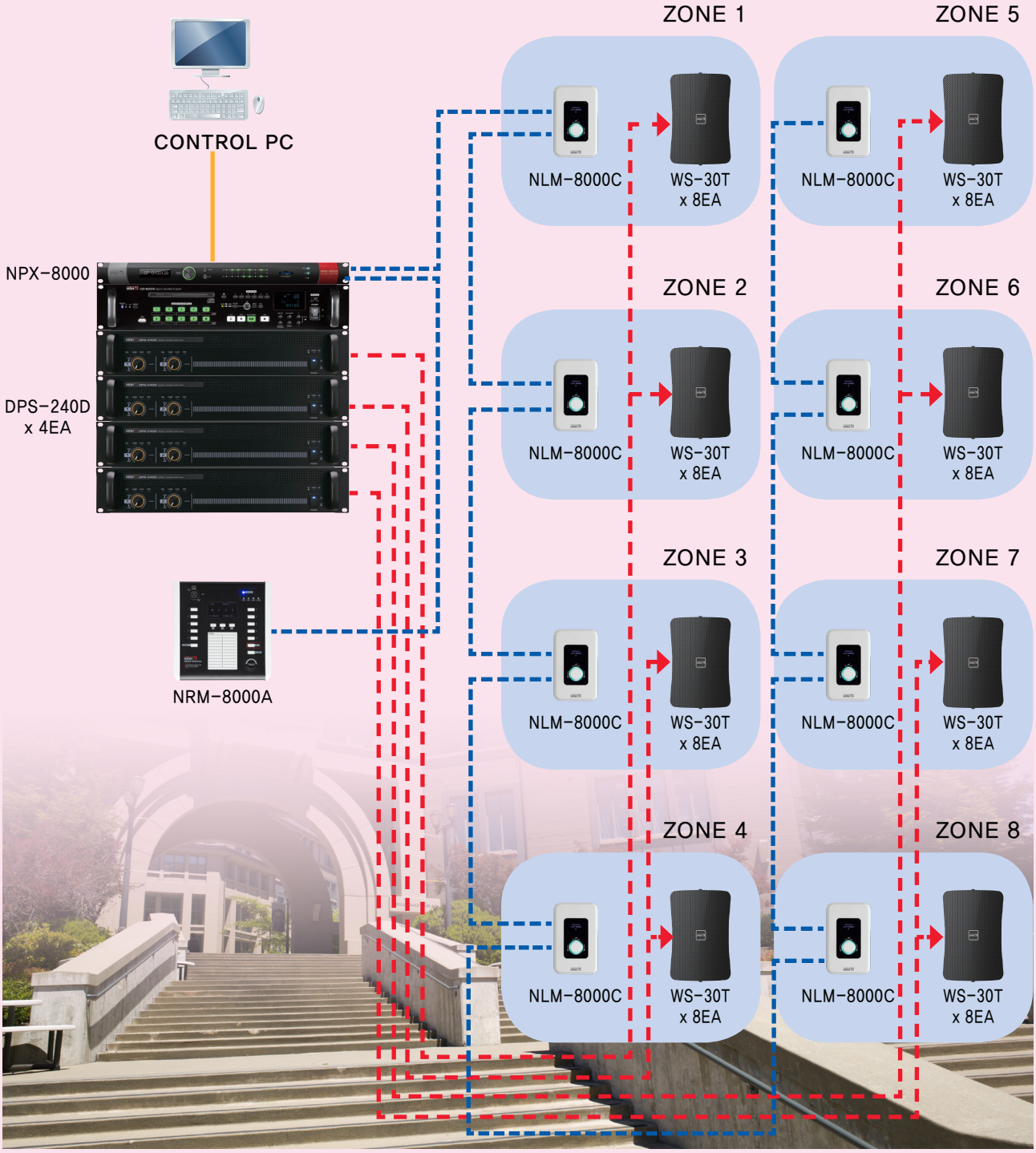
If a variety of events such as training centers and marts take place and frequent broadcasts occur, the ARM-911A and DPS series can be used to configure a simple broadcasting system. 10 messages can be stored in real-time or scheduled broadcasts in case of need, so you can prepare for various situations and remote announcement is possible through remote microphone.



APPLICATION 4

When spatial-specific distributed control is required.

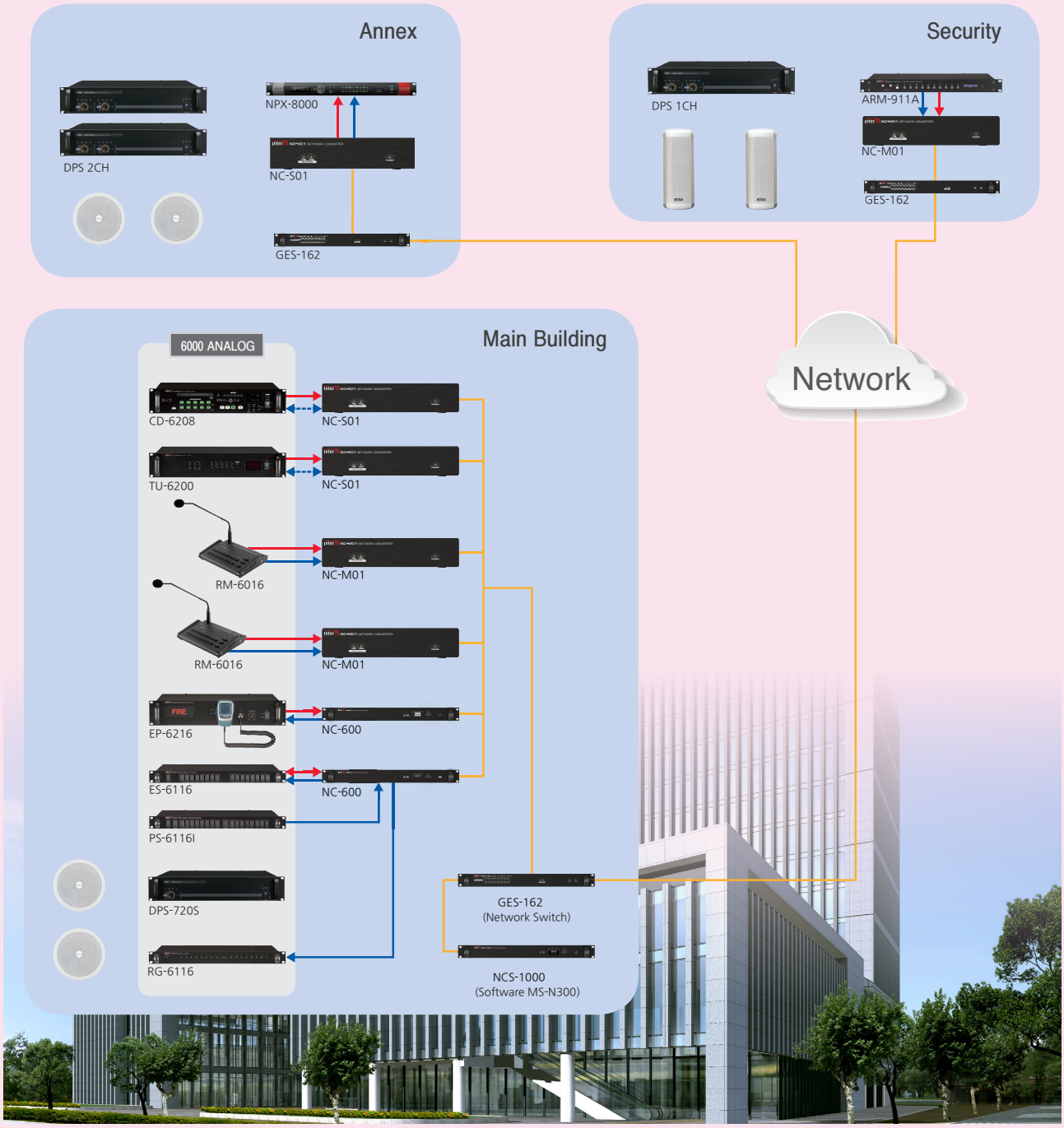
If you need to reproduce different sound sources or send out guidance messages for each space such as school, shopping center, etc., you can configure distributed control system using Audio Matrix NPX and DPS series. The matrix, volume, and DSP can be easily set up through the MP-8000, an integrated control program, and mobile applications . In addition, the wall mounted controller in each space allows the user to select the desired sound source directly from the place, and adjust the audio input and volume.



APPLICATION 5

If you want to broadcast remotely to an annex, or if you want to expand the building and need integrated control

If you want to broadcast to other buildings or distant areas, or if you need to control the broadcasting system installed in each area, you can easily configure the integrated control system through INS network converter and DPS series. You can send various event messages through the ARM-911A from the guard to the main building, or you can receive the main building's broadcast from the annex.
In addition, remote areas such as main building, annex, guard room can be integrated and controlled through GUI.



MATCHING PRODUCTS

◆ Distributed Sound System

6000 Analog System

6000 1/8 BUS System

NPX System

◆ CS Series Ceiling Speaker

Rated Power	Material (Non-flammable/flammable)		Shape	
1W	A	Advanced	Q	Square
3W	F	Noneflammable	C	Clip
5W	M	Metal	E	Exposure
10W 15W	H	High Power	–	
20W 30W 80W	Ex 1) CS-610 : Ceiling 6.5" Driver, 10W / CS-610M : Ceiling 6.5" Driver, 10W, Metal Ex 2) CS-301FC : Ceiling 3" Driver, 1W, Noneflammable, Clip shape			

◆ CU Series Column Speaker

	Division	Output	IP
CU-20	Indoor	10W/20W/40W	–
	Outdoor	10W/20W/40W	IP34
CU-40	Indoor	10W/20W/40W	–
	Outdoor	10W/20W/40W	IP34
	Outdoor U Braket	10W/20W/40W	IP34
CU-60	Indoor	15W/30W/60W/90W/120W	–
CU-80 EN 54	Special (Prevention of coloring, etc.)	10W/20W/40W	IP45

◆ WS Series Profession Compact Wall Speaker

		WS-15T	WS-30T	WS-50T	WS-80T
Power Select	8Ω	15W	30W	50W	80W
	100V	15W	30/15W	50/25W	80/40W

Inter-M Corp. (IMK)

719, Dobong-ro, Dobong-gu, Seoul, Korea
Overseas Sales Team
Tel_ +82-2-2289-8141~7 **Fax_** +82-2-2289-8149 **E-mail_** overseas@inter-m.com **www.inter-m.net**

※ Design and specification are subject to be changed for the improvement of product quality without pre notice.

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