

8CH Digital Power Amplifier

# DPA-50E





# DPA-50E

## 8CH Digital Power Amplifier

### ●● Development Background

Inter-M, with a wide range of commercial amplifier, has developed 1200 W high-power digital amplifier first in the market and been awarded as the best patent in Korean domestic market in 2015 with the products. DPA-50E is made based on this technology. It is 50 W×8CH(100V, 70V) multi-channel amplifier which outputs 60 W×8CH(4 Ω) and 30 W×8CH(8 Ω). In this way, the DPA-50E can both be used as professional and commercial audio. DPA-50E is essential to build distributed control system effectively with NPX system of Inter-M. Designed not only for smaller venues for individual uses but also for larger venues such as hotels, training centers, schools and conference halls as it can broadcast different sound sources to different zones and control separately by channels.

# FEATURES

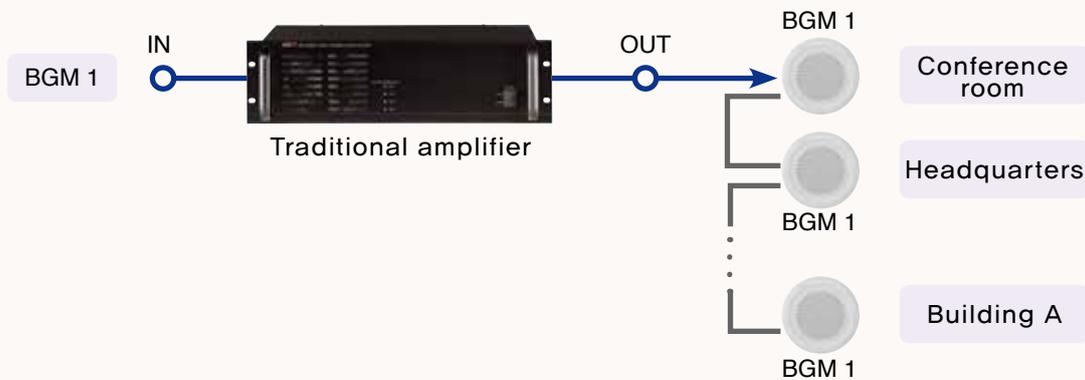


## • Optimized output for both PA&SR use

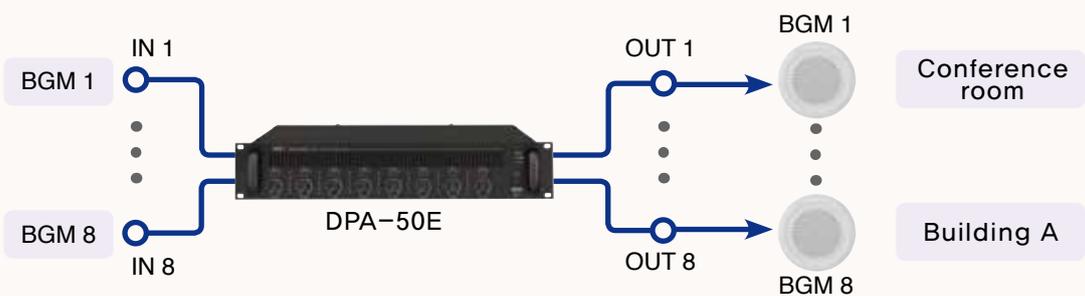
DPA-50E has OPT applied HI-Z(100 V, 70 V) output terminal and OPTLESS applied LO-Z output terminal individually. HI-Z terminal can be useful with the commercial use as it requires distant transmission and parallel connection. LO-Z terminal is particularly for professional use that requires high quality sound transmission in close range between the speaker and the amplifier. DPA-50E fits in various distributed control system application as it both suits for commercial and professional use.

## • 50 W×8CH multi-channel amplifier

Traditional amplifier sends one input sound source to all output en bloc but DPA-50E is a multi-channel amplifier that can broadcast different sound sources to each 8 channels and control them by zones. In other words, it can play BGM in cafeteria while broadcasting microphones in the headquarters. This can be a very useful feature from smaller venues such as cafes and stores to larger venues like schools and department stores.



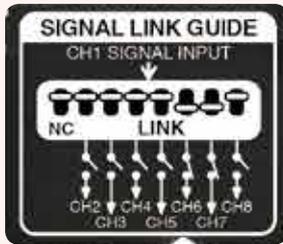
<Traditional amplifier>



<DPA-50E>

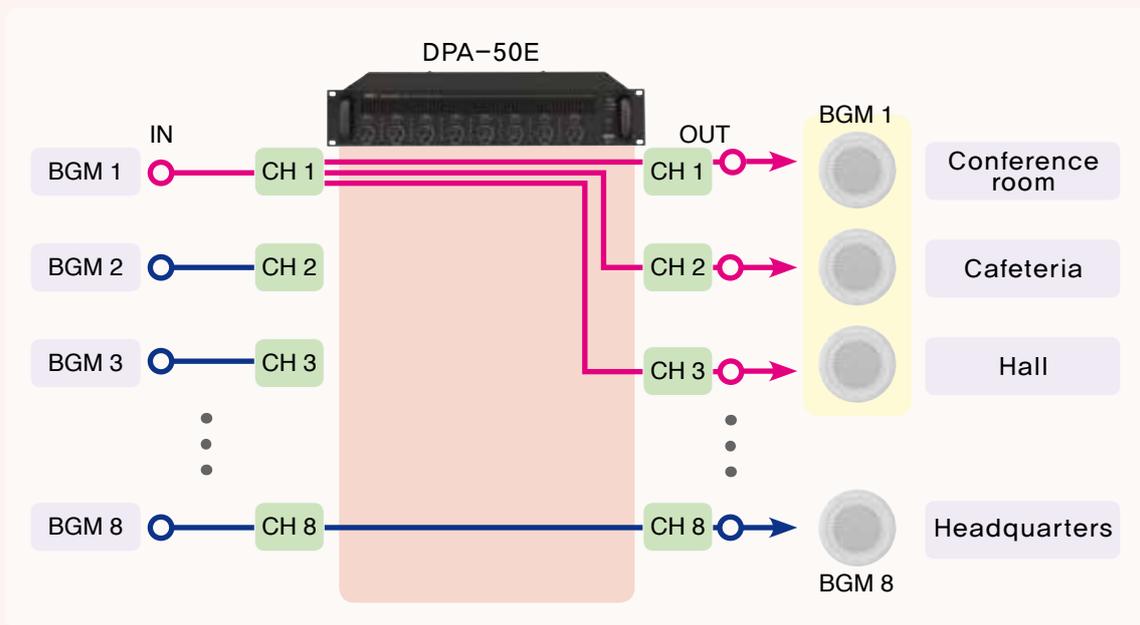
# FEATURES

## ●● Signal Link function for multi input



With the Signal Link Switch displayed on the left side, send sound sources input to CH 1 to linked channels at the same time. For instance, switch on CH 2 and CH 1 input sound source is output to CH 3 simultaneously. Use the Signal Link function to utilize DPA-50E as you wish.

(※ Channels that are switched off output inserted sound sources to corresponding channels)



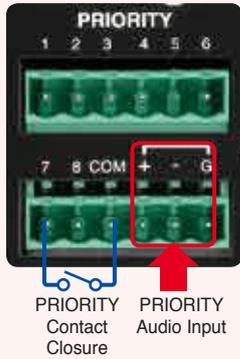
〈Signal Link Switch Setting Example〉

## ●● Secure operation through AC/DC dual power

DPA-50E is AC/DC dual powered and is DC 24 V provided with the battery when urgent situation such as blackout occurs. DC power is emergency power that operates regardless of ON/OFF of the power switch. It is automatically switched to AC power even when DC power is operating if AC power is working in order.



# FEATURES



## ●● Priority Function

Automatic emergency broadcasting is available using priority function of DPA-50E in emergency situations. When contact closure is inserted to PRIORITY terminal on the rear panel, signals input to the PRIORITY terminal are output before the ones entered to PGM INPUT terminal.

For instance, PGM INPUT of CH 7 is muted and sound sources input to the PRIORITY audio terminal are broadcasted when the contact closure is inserted to the PRIORITY terminal of CH 7.

※ PGM : Programmable

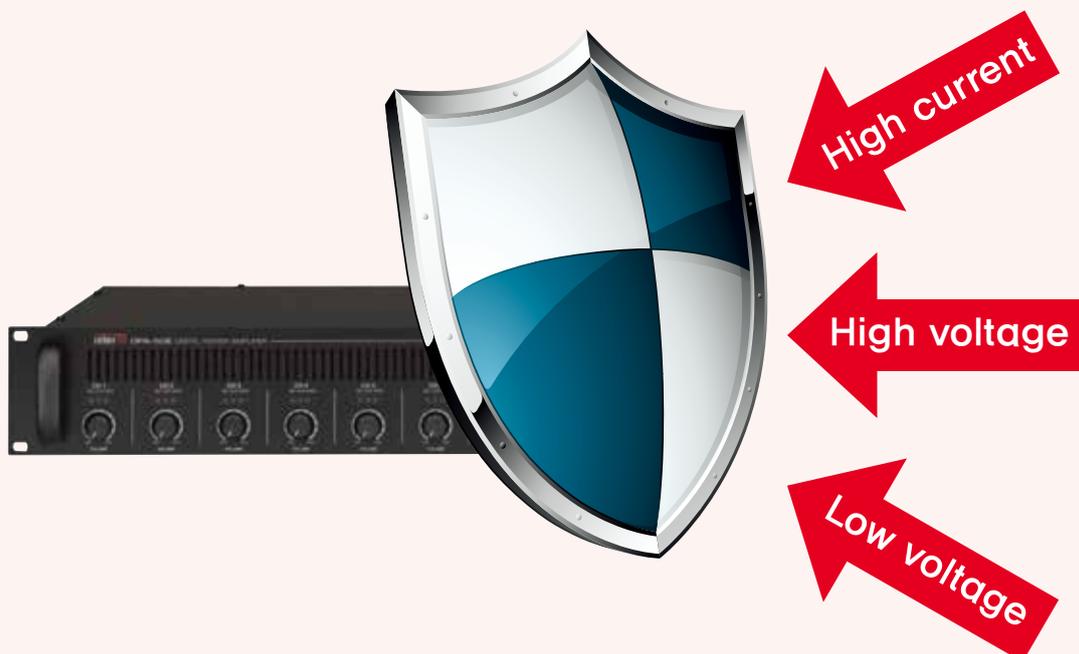


## ●● LED Indicators

The backlit LED enables to monitor AC/DC power, STBY status, SIG(-30 dB) output level of each channel, Clip and Protect status. Also, with the volumes of each channel on the front panel, separate volume control is possible.

## ●● Stability guaranteed with perfect protection circuit

Stability of the device is guaranteed with OVP(Over-Voltage Protection) function which perceives and blocks when in/output voltage is higher or lower than the settled voltage range, UVP(Under-Voltage Protection) and overcurrent protection function.



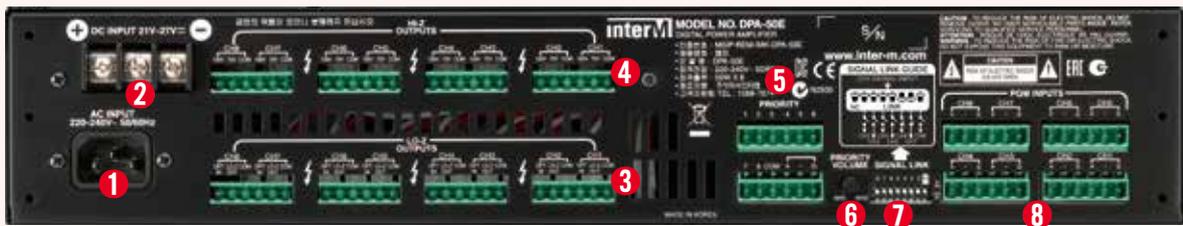
# FRONT/REAR PANEL

## FRONT PANEL



- 1 Power switch, AC/DC/STBY indicating LED
- 2 Output signal level display
- 3 Volume control
- 4 Cooling vents

## REAR PANEL

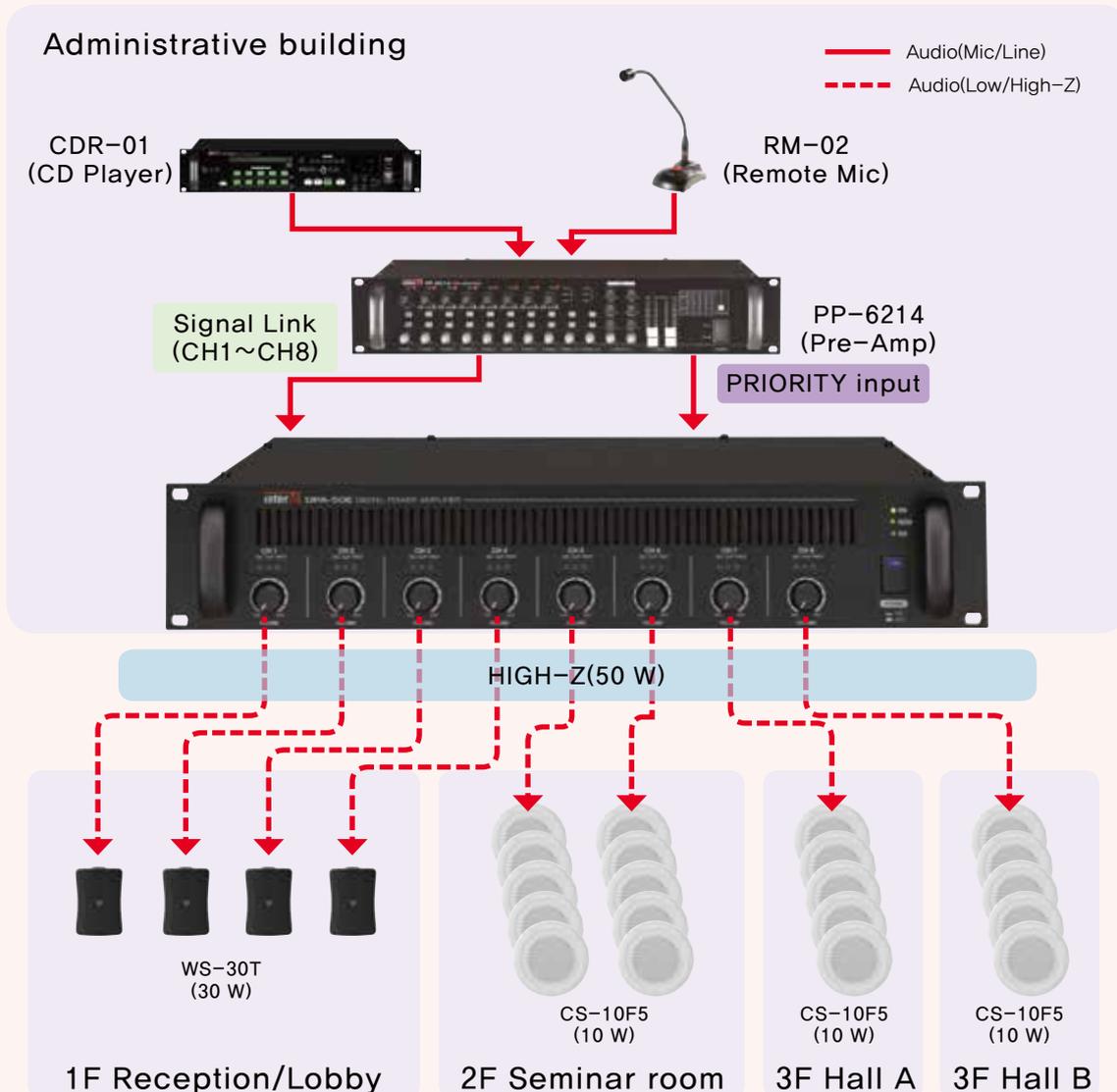


- 1 AC power input
- 2 DC power input
- 3 Low impedance speaker output terminal
- 4 High impedance speaker output terminal
- 5 PRIORITY audio signal and contact closure terminal
- 6 PRIORITY volume control
- 7 Signal link switch
- 8 Audio signal input terminal(PGM INPUT)

# APPLICATION 1

## ● Applications for Medium to Large-sized Venues like Shopping Malls

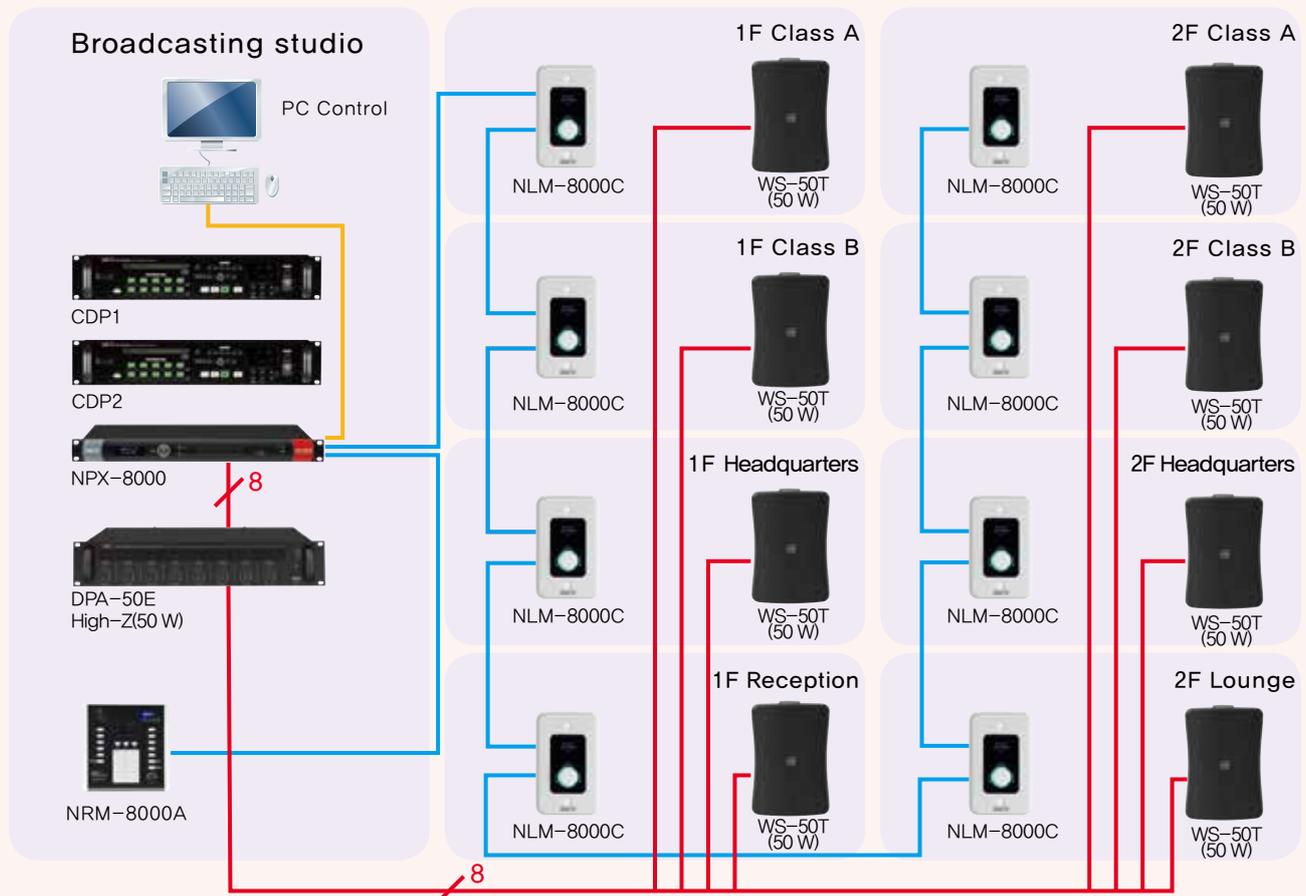
The amplifier not only can do integrated broadcast over the whole building but make individual broadcast in certain zones as well. With the Signal Link function of the DPA-50E, you can easily make integrated broadcast in wanted zones by inputting sound sources to CH 1. Plus, use Priority Function to make announcements using the remote microphone, RM-02. For instance, if announcement is made to CH 7 using the Priority Function while BGM is played in Hall A, it is switched from BGM play to announcement broadcast.



# APPLICATION 2

## ●● Application of distributed control system in venues like school and department stores

This is distributed control system which is appropriate for the venues like school and department store. By interlocking with Inter-M's NPX System, separate broadcasting and control are available. Use BGM control of NPX system installed in each zone to select sound sources and control the volume. Multi-channel amplifier, that controls each output zone, is essential when composing distributed control system such as NPX system. DPA-50E will provide ultimate performance in large-sized distributed control system.



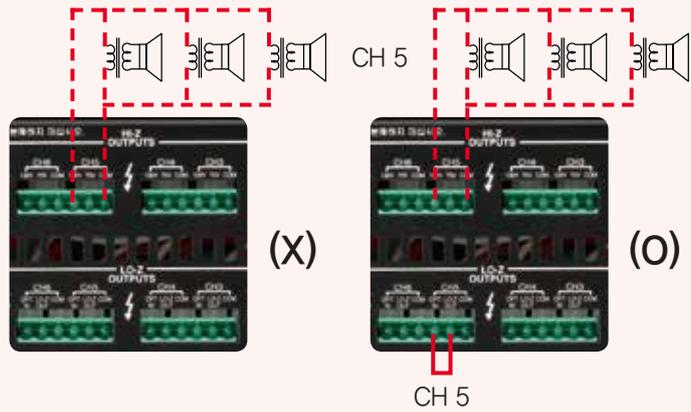
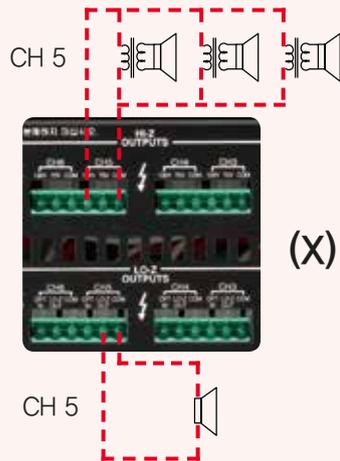
# SPECIFICATIONS

	<b>DPA-50E</b>
Rated Output Power	60Wx8CH (4Ω), 50Wx8CH (70V/100V)
Output Level/Impedance	100V/200Ω
	70V/100Ω
	15.5V/4Ω
Input Sensitivity	1V/10kΩ
THD (AES17, Rated Power)	Less than 0.1%
S/N (20kHz LPF)	More than 90dB
Frequency Response (1W, ±3dB)	80Hz~18kHz
Operating Temperature	-10°C ~ 40°C
Power Source	AC 220-240V, 50/60Hz, DC 24V
Power Consumption	110W
Weight (Set)	11.3kg/24.9lb
Dimensions (Set)	482(W) x 88(H) x 420(D)mm/18.98(W) x 3.46(H) x 16.53(D)in

# CAUTION

Do not use HI-Z terminal and LO-Z terminal at the same time.

Connect LO-Z OUT terminal and OPT terminal when using HI-Z terminal.



- ※ Be noted not to use HI-Z terminal(100 V, 70V) and LO-Z terminal(4 Ω) of the same channel at the same time.
- ※ When connecting to the speakers using HI-Z terminal(100 V, 70 V), connect LO-Z terminal and OPT IN terminal.





**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.com**

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

2017. 2. V4