

4CH Digital Power Amplifier

DPA-150Q





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Development Background

DPA-150Q is a maximum of 150 W×4CH(100 V, 70 V, 8 Ω) multi-channel PA/SR amplifier that is developed with best patent awarded technology of Inter-M. The amplifier will build much more cost effective, low heat, light weight system compare to the previous analog amplifier. DPA-150Q will particularly maximize its potential in large-sized places such as shopping malls and education centers in which separate control is necessary. Now, experience smaller but more powerful broadcasting system of DPA-150Q!

FEATURES

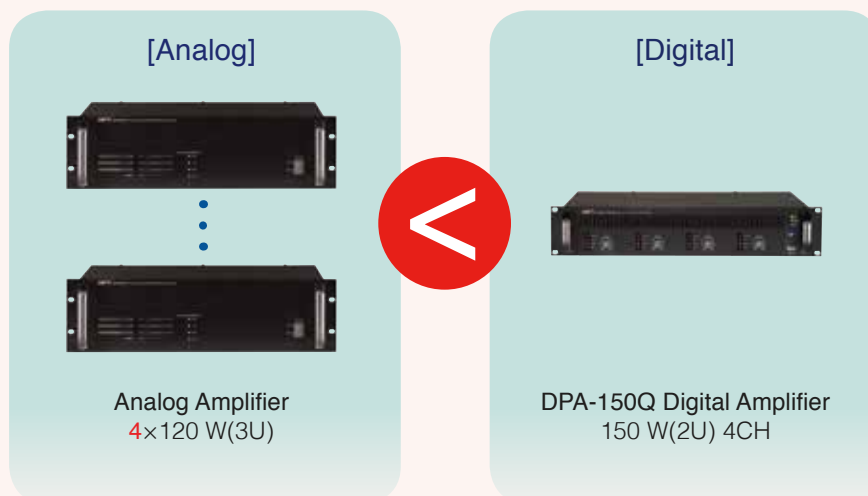
●● OPTLESS Output Design for Both PA and SR Use

DPA-150Q is the very first 150 W OPTLESS designed High-Z(100 V, 70 V) output amplifier. Due to OPTLESS design, the amplifier is low-electricity, low-heat, and lightweight. With the select switch of the each channel, choose output of 100 V/70 V/8 Ω and utilize the device in various applications in need of High-Z/Low-Z distributed control system.



●● 150 W×4CH(100 V, 70 V, 8 Ω) Class-D Multi-channel Amplifier

All new DPA-150Q is a 4CH digital amplifier made with the 30-year techniques of Inter-M. It is 2U-sized 150 W×4CH, so it saves space and cost compare to analog amplifiers. For instance, 12U-sized space (4 amplifiers) was needed to transfer different sound sources to 4 zones with the previous analog amplifier. However, with the new DPA-150Q, only 2U-sized space is needed to control 4 zones. It definitely is space and cost-effective.



FEATURES

●● Secure Operation through AC/DC Dual Power

DPA-150Q 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.



●● High-quality Sound of High S/N and Low THD

DPA-150Q is a high quality commercial amplifier with specifications like S/N over 100 dB and THD below 0.2 %. So, the amplifier is adequate for large-sized places like shopping mall, department store and bank the venues which are in need of supreme quality BGM play.

- * S/N : This is Signal to Noise value. Higher the value, clearer the sound.
- * THD : This is an acronym of Total Harmonics Distortion. Lower the value, better the sound.



●● LED Indicators

The backlit LED enables to monitor AC/DC power, STBY status, -30 dB/-10 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.

FEATURES

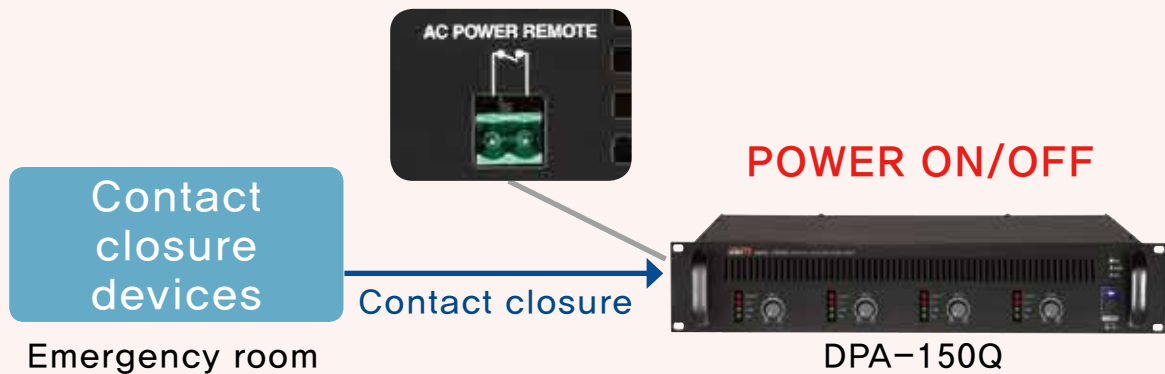
●● Priority Function



Automatic emergency broadcasting is available using priority function of DPA-150Q 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.

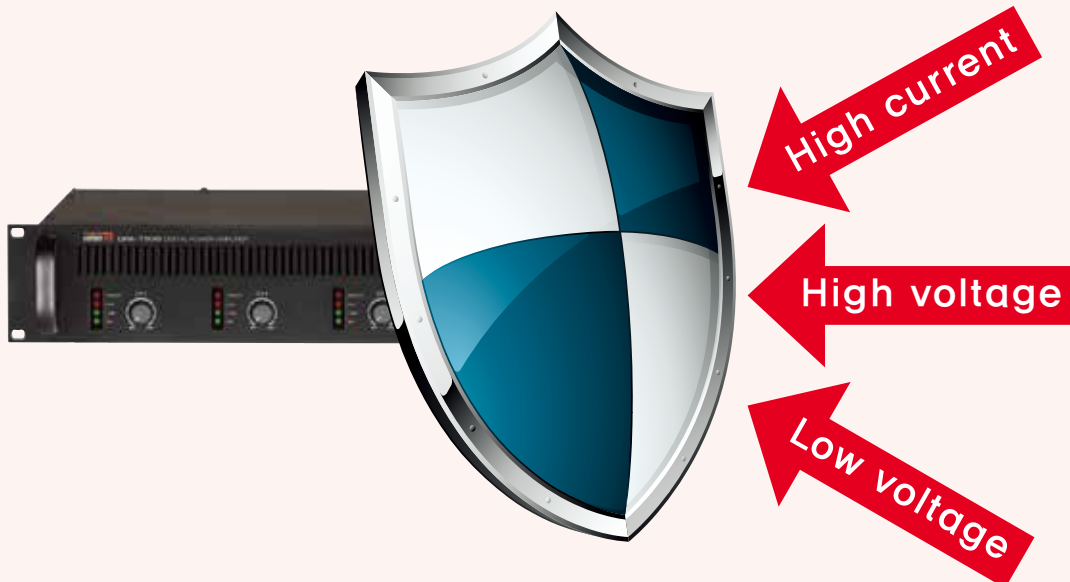
●● Remote AC Power Control Function to On/Off

With the AC POWER REMOTE terminal on the rear panel, DPA-150Q power can be controlled from remotely. If contact closure is input to the AC POWER REMOTE terminal when DPA-150Q is OFF, the device turns on and if contact closure is inserted when ON, the device turns OFF.



●● 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 AC/DC/STBY LED Display
- 2 Signal Output LEVEL Display
- 3 Volume Control
- 4 Ventilation Hole
- 5 Power Switch

REAR PANEL



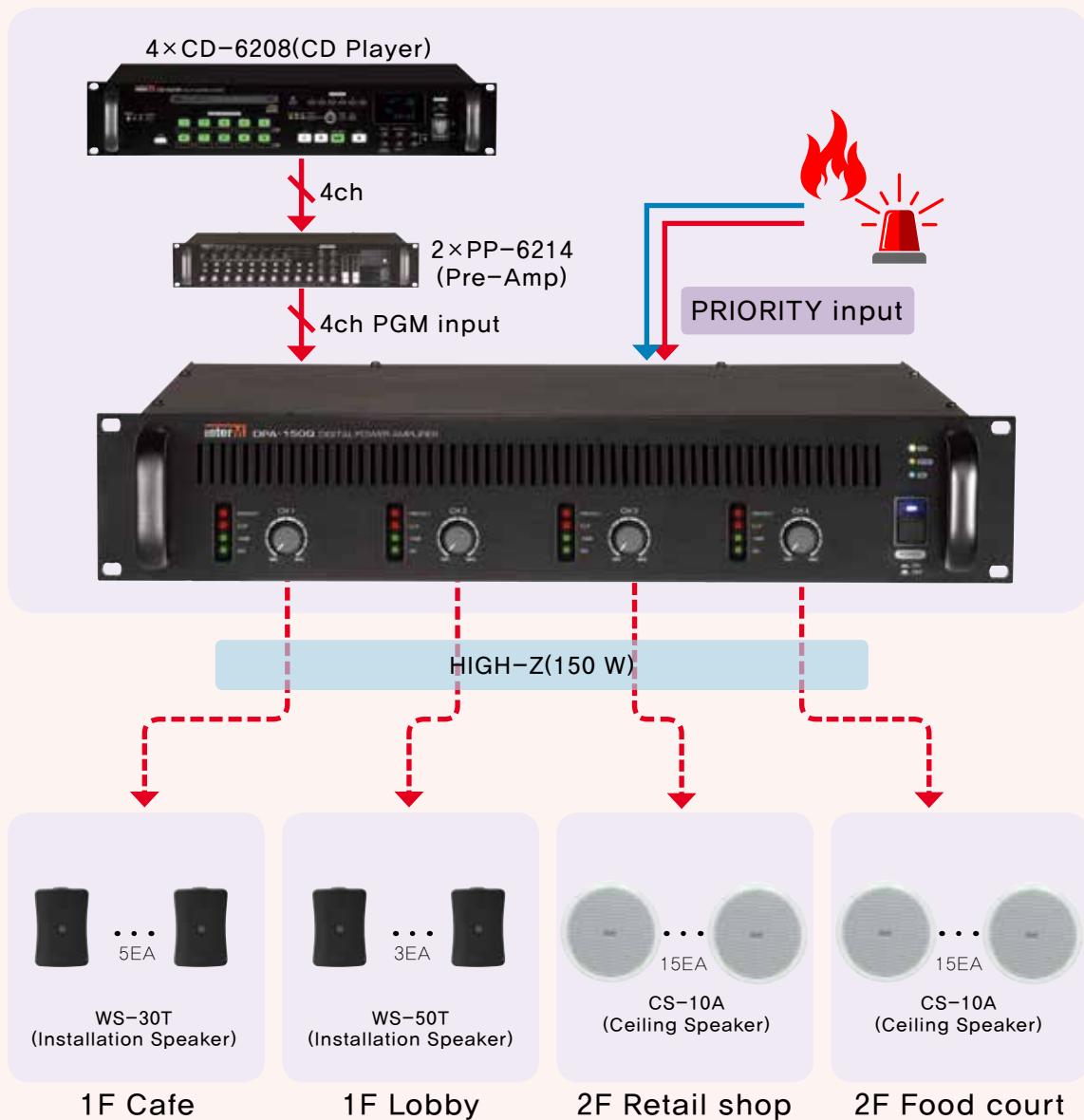
- 1 PRIORITY INPUT and Contact Closure Terminal
- 2 PRIORITY VOLUME Control
- 3 PGM INPUT
- 4 Output Terminal
- 5 OUTPUT VOLTAGE Select Switch(8 Ω , 100 V, 70 V)
- 6 AC Power Terminal
- 7 DC Power Terminal
- 8 AC POWER REMOTE
- 9 Ventilation Hole

APPLICATION 1

●● Applications for Small-sized Buildings like Small Stores and Cafeteria

Connect source devices to the audio input terminals of the DPA-150Q to broadcast different sound sources to maximum of 4 different zones. It is particularly appropriate for long distance transmission. By connecting the installation speaker WS Series and the ceiling speaker CS Series to HI-Z terminal that must be connected in parallel, configuring distributed control system is possible. Moreover, its priority function will help out the emergency situations.

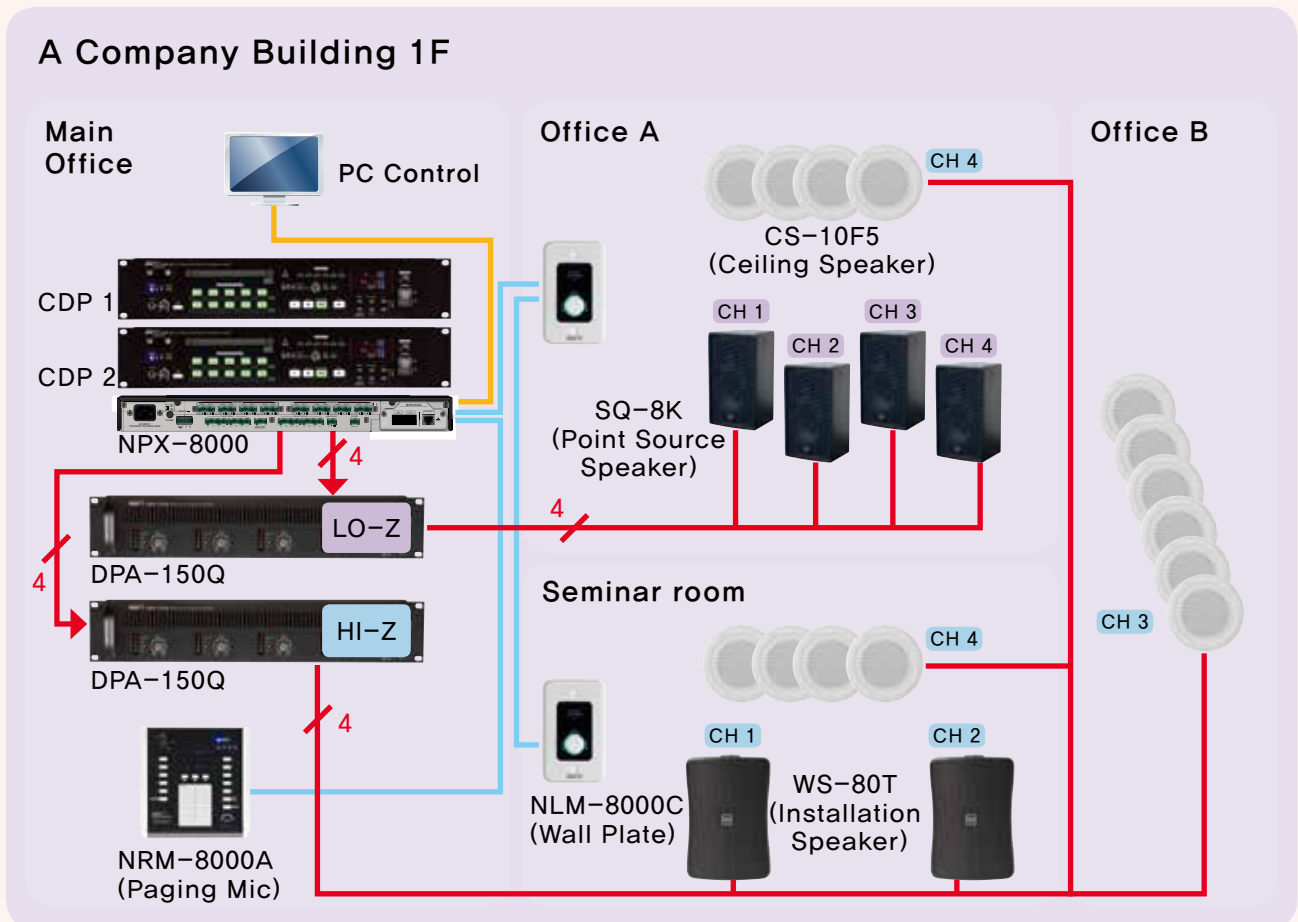
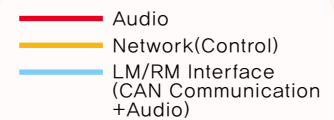
Administrative office



APPLICATION 2

•• A Distributed Control System in a Company Building

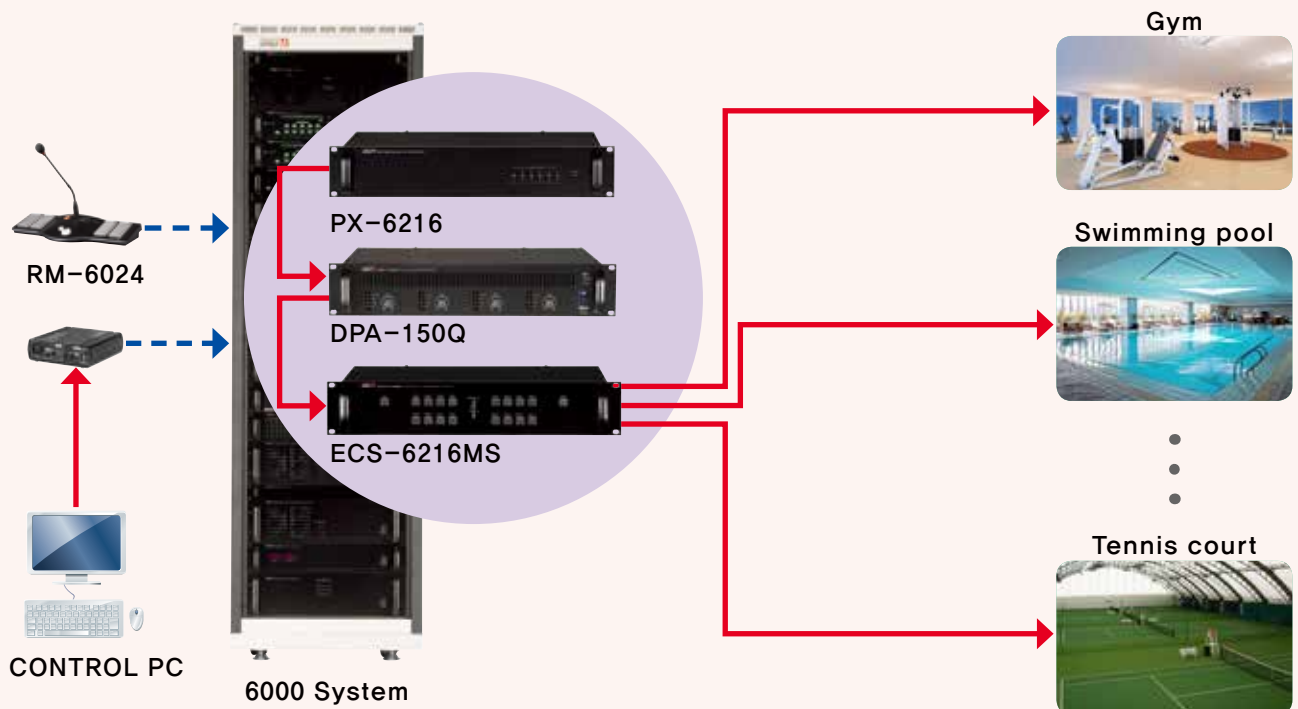
DPA-150Q can be applied in separate broadcast needed facilities such as a company building and make it distributed control system by interlocking with NPX-8000. NPX-8000 is particularly suitable for providing separate sound sources to different zones depending on the purposes. In a seminar room, use LO-Z speaker SQ-8K to play wanted sound sources and in a reception, install WS Series speakers with elegant design. Ceiling speakers with HI-Z output will cover overall rooms with announcements. The remote microphone NRM-8000A will enable paging broadcast and wall mount controller NLM-8000C will make selecting different sound sources and controlling them separately possible.



APPLICATION 3

•• When Used in Small-sized Places such as Stores and Cafeteria

Build the sound system by connecting source devices to the audio input terminal of DPA-150Q in order to broadcast in maximum of 4 zones in small-sized places like stores. Connect the CU-930 to HI-Z terminal which is particularly for distant transmission and the SQ-8K to LO-Z terminal which is for high-quality short-distance transmission. With PX-6216 of 16 x 8 and relay group/speaker selector ECS-6216MS, it can selectively deliver sound sources to each zone.



GS speaker



CI speaker



WS speaker



MS speaker



SPECIFICATIONS

	DPA-150Q
Rated power	150 W×4
Peak Power	180 W/CH
Output Level/Impedance	100 V/66.7Ω
	70 V/32.7Ω
	34.6 V/8Ω
Input Sensitivity	1 V/10kΩ
THD (AES17, 1/8 Power)	Less than 0.2 %
S/N (20kHz LPF)	More than 100dB
Frequency Response (1W, ±3dB)	50Hz ~ 20kHz
Operating Temperature	-10 °C ~ 40 °C
Power source	AC 100-240V, 50/60Hz or DC 24V
Power consumption	140 W
Weight (Set)	6.82kg/15.04lb
Dimensions (Set)	482(W) × 88(H) × 367(D)mm/18.98(W) × 3.46(H) × 14.45(D)in



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

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