



D5501C+DSP1280F
Professional Mobile Audio
System Solution for Outdoor
Performances

I. System Solution

- This solution is a **highly integrated, rapid-deployment** mobile audio system, specifically designed for small- to medium-sized performances, conferences, and outdoor events. Centered around an **all-in-one rack-mount mixer**, the system combines **modular active line array speakers** to deliver a complete professional audio workflow—from input to sound reinforcement.



Design Objective



Integrated Design

Fast setup and dismantling, enabling system deployment within 15 minutes.



Stable Wireless Performance

UHF true diversity reception ensures flexible operation and strong anti-interference capability



Active Line Array System

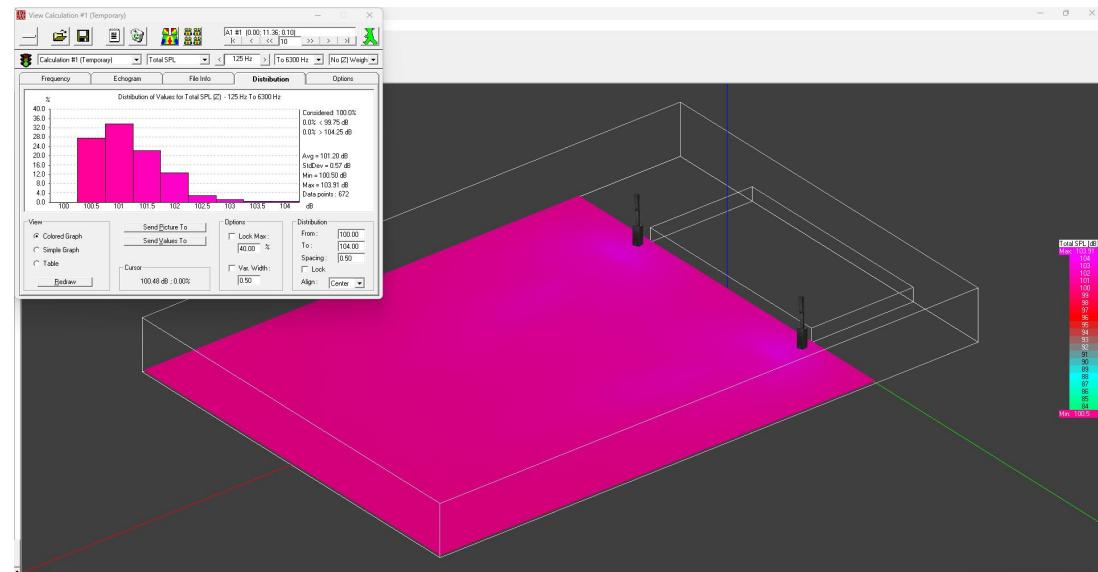
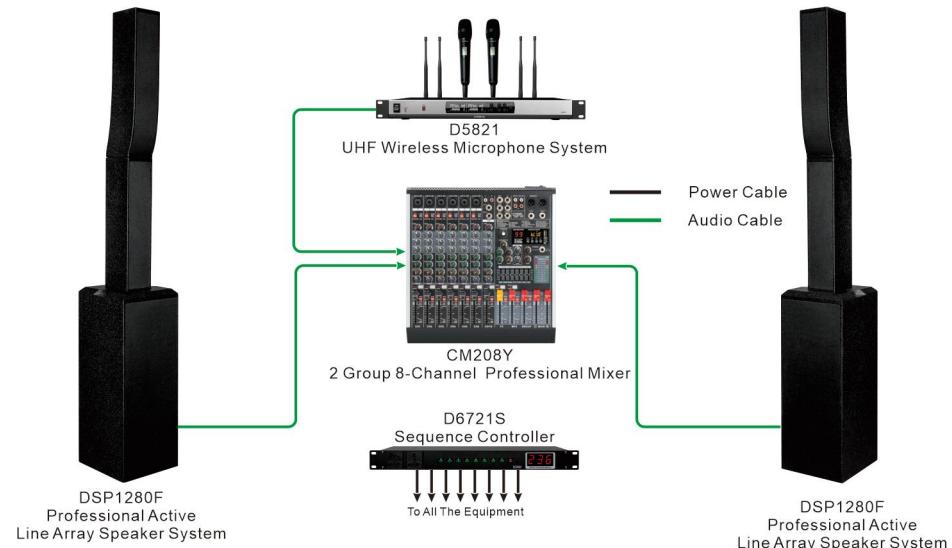
Outstanding sound quality with even coverage and a wide $140^\circ \times 25^\circ$ dispersion



Versatile for Multiple Scenarios

Suitable for both indoor and outdoor use, with IP66 protection for harsh environments

II. Outdoor Small-Scale Event Solution



No.	Model	Product Name	Quantity
D5501C			
1	D5821	2 Channel UHF Wireless Microphone System	1
2	CM208Y	2 Group 8-Channel Professional Mixer	1
3	D6721S	Sequence Controller	1
4	XLR (Female)-XLR (Male) Connector	10 meters Connector x2pcs	1
5	Display Cabinet	Dimension: 53x53x41cm	1
1	DSP1280F	800W+800W Weatherproof Line Array Loudspeaker	2

Note: This solution is provided for reference only. For specific requirements, please feel free to contact us.

Application Scenarios: Outdoor music festivals, street performances, small-scale celebrations, commercial roadshows, community events, and more.

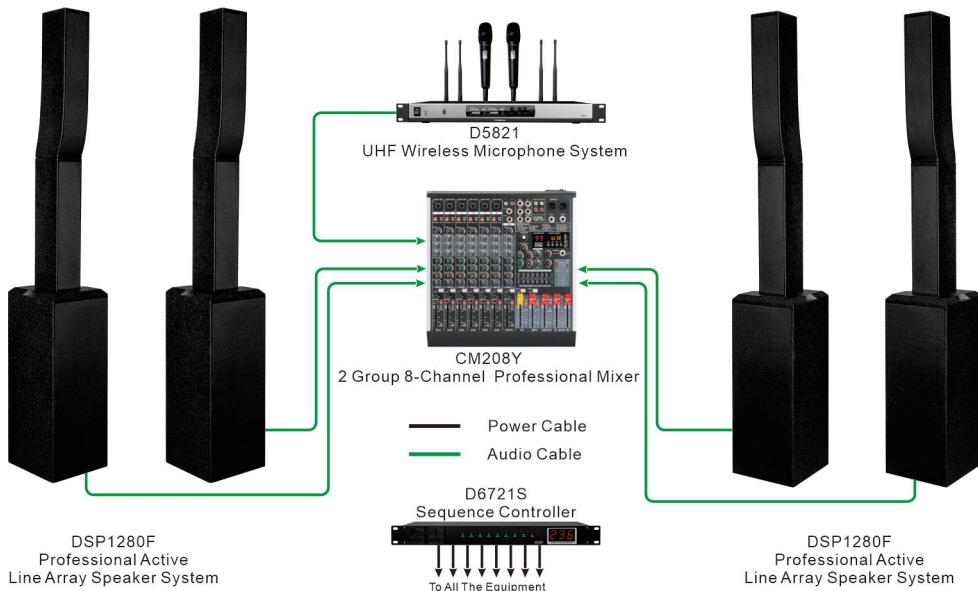
Coverage Area & Capacity: 300–750 m², accommodating approximately 300–800 people.

System Configuration: Speech system + sound reinforcement system.

System Advantages:

- **Rapid Deployment:** Modular connection design enables system setup within 30 minutes, well-suited for touring and mobile performances.
- **High SPL Coverage:** A maximum sound pressure level of 130 dB ensures clear speech and music even in noisy outdoor environments.
- **Water and Dust Protection:** IP66-rated design withstands sudden weather changes without the need for additional rain protection.
- **Uniform Sound Coverage:** A 140° horizontal dispersion angle delivers consistent sound across wide audience areas, minimizing dead zones.

III. School Auditorium Solution



No.	Model	Product Name	Quantity
D5501C			
1	D5821	2 Channel UHF Wireless Microphone System	1
2	CM208Y	2 Group 8-Channel Professional Mixer	1
3	D6721S	Sequence Controller	1
4	XLR (Female)-XLR (Male) Connector	10 meters Connector x2pcs	1
5	Display Cabinet	Dimension: 53x53x41cm	1
1	DSP1280F	800W+800W Weatherproof Line Array Loudspeaker	4

Note: This solution is provided for reference only. For specific requirements, please feel free to contact us.

Application Scenarios: School auditoriums, theaters, mid-sized conference halls, indoor gymnasiums, exhibition centers.

Coverage Area & Capacity:

700–1,800 m², accommodating approximately 800–2,000 people.

System Configuration:

Speech system + sound reinforcement system.

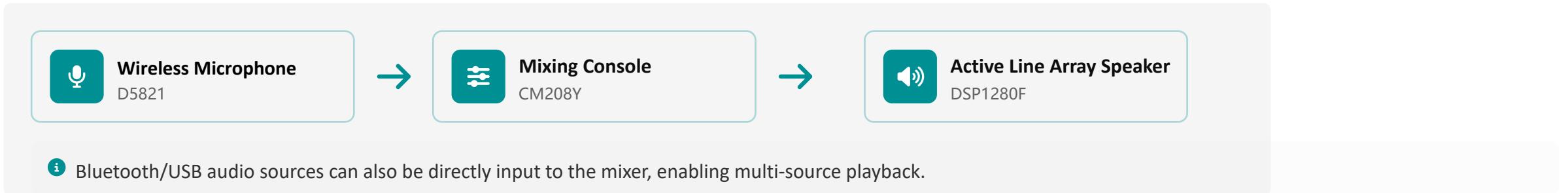
System Advantages:

- Precise Sound Field Control:** Supports RS485-based software tuning to optimize frequency response for the specific acoustic conditions of auditoriums.
- High Scalability:** For larger venues, multiple DSP1280F units can be cascaded to expand system capacity.
- Rapid Deployment:** Integrated mixer rack design enables fast setup and commissioning.
- Uniform Coverage:** A 140° horizontal dispersion angle ensures even sound distribution across wide audience areas, minimizing dead zones.

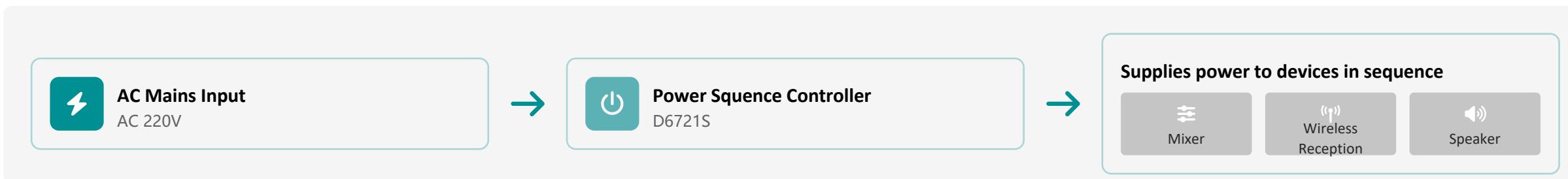


IV. System Connection Logic – Signal and Power Flow

Signal Flow



Power Flow



Plug-and-Play, No Complex Wiring Required.

All devices connect via standardized interfaces, with separate signal and power lines to prevent interference.

The power sequence controller automatically manages the power-on order, preventing current surges and ensuring safe, stable operation.

V. System Composition – Two Core Modules



01 Rack-Mounted Mixer System D5501C

Audio Mixer CM208Y

8-channel input, supporting 6 XLR inputs + 2 stereo inputs.

Wireless Microphone System – D5821

UHF true diversity reception with dual handheld microphones.

Power Sequence Controller D6721S

8-channel sequenced power output with voltage display.

Cabling & Rack Cabinet

Professional-grade cabling with a standardized rack cabinet design.



02 Active Line Array Speaker System DSP1280F

Modular Design

Supports flexible combinations to meet the requirements of different venues.

IP66 Weatherproof

Suitable for outdoor use in harsh environments without additional protection.

Built-in 2×1200 W Amplifiers:

Independent amplification without the need for external devices.

Coverage Angle – 140° × 25°

Wide-angle dispersion ensures even sound distribution across the audience area.



The system supports flexible expansion and customization, allowing configuration adjustments according to actual requirements.

VI. Why Choose This System?



- **Rapid Deployment**

Integrated rack design enables system setup **within 15 minutes**. No complex wiring is required—devices are plug-and-play, allowing quick on-site deployment and significantly improving work efficiency.

- **High-Quality Sound Output**

Professional mixer combined with line array speakers delivers **clear and powerful sound**. With 140° wide-angle coverage, every position in the venue enjoys high-quality audio experience.

- **Power Safety**

The sequencing controller **prevents current surges** and automatically manages device startup order, effectively protecting equipment, extending lifespan, and ensuring stable system operation.

- **Environmental Adaptability**

Speakers are **rated IP66** for water and dust protection, suitable for both indoor and outdoor use. They perform reliably in rain, dust, high or low temperatures, and other challenging conditions.

- **Stable Wireless Performance**

UHF true diversity system provides strong interference resistance and frequency stability. Infrared automatic frequency synchronization allows simple operation and long-range transmission, ensuring smooth performance and meetings.



VII. D5501C System Configuration



Audio Mixer CM208Y

8-channel input, supporting 6 XLR inputs and 2 stereo inputs.



Wireless Microphone System D5821

UHF true diversity reception with dual handheld microphones.



Power Sequence Controller D6721S

8-channel sequenced power output with voltage display.



D5501C



Cables and Rack

Includes professional-grade cables and a standardized rack design.

VIII. Product Introduction



Audio Mixer CM208Y

8-Channel Input

supporting 6 XLR inputs + 2 stereo inputs

Bluetooth/USB Audio Playback

Supports direct connection from smartphones or computers

24-bit DSP Digital Effects

Built-in reverb and echo effects.

48V Phantom Power

Supports condenser microphones.



Wireless Microphone D5821

UHF True Diversity Reception

Stable signal with strong anti-interference.

Dual Handheld Microphones

Suitable for two-person hosting or singing.

IR Infrared Frequency Synchronization

Quick pairing and easy operation.

High-Fidelity Sound

Clear vocals with excellent reproduction.



Power Sequence Controller D6721S

8-Channel Sequenced Power Output:

Protects device startup order.

Voltage Display

Monitors power status in real time.

Supports Remote Triggering

Suitable for automated control.

Inrush Current Protection

Extends equipment lifespan.



Smart
Control



Stable &
Reliable



Easy
Operation



Safety
Protection

IX. Product Introduction_DSP1280F



2×1200W

Built-in Amplifier

35Hz-20kHz

Frequency Response

140° × 25°

Coverage Angle

IP66 Water-Resistant Design

Coated with advanced polyurea waterproof paint, reaching an IP66 waterproof level.



140° Horizontal
* 25° Vertical



Exclusive
model
design



Software
control

Segmented
sound source
technology

Plug-and-play
package

Easy to transport

(2 column speakers + 1 subwoofer +
accessory bag + flight case)

About 76KG / Set

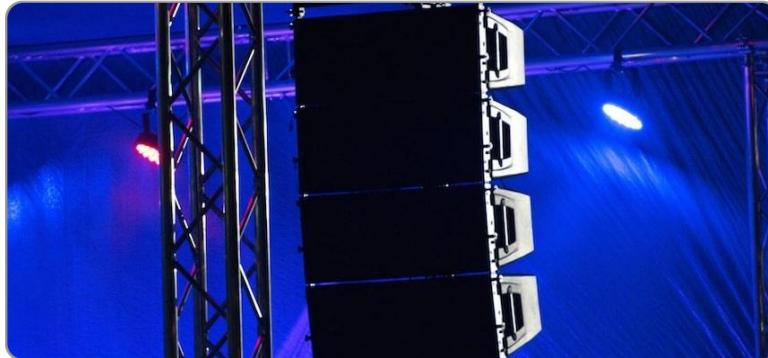


DSP1280F Professional Line Array Speaker System

800W 6 x 5.5" Passive Column Array Speaker

800W 2 x 12" Active Subwoofer

X. Versatile Indoor and Outdoor Applications



Indoor Scenarios

- ✓ Meeting Rooms
- ✓ Auditoriums / Lecture Halls
- ✓ Training Centers
- ✓ School Halls
- ✓ Theaters
- ✓ Multi-Purpose Halls

Outdoor Scenarios

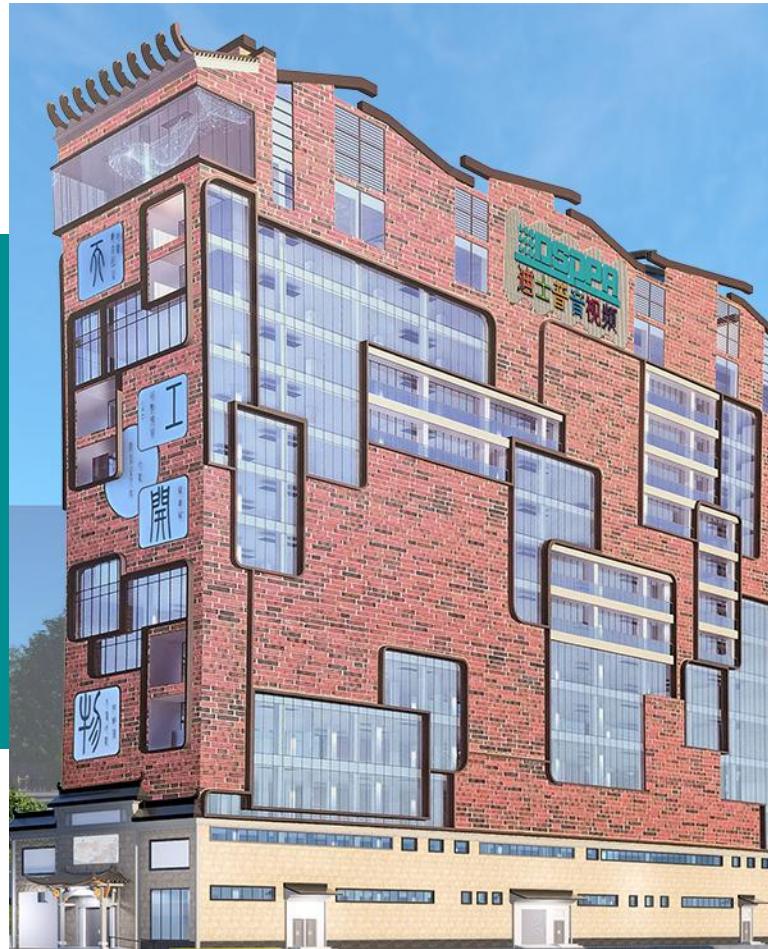
- ✓ Plaza Performances
- ✓ Music Festivals
- ✓ Roadshow Events
- ✓ Park Gatherings
- ✓ Sports Events
- ✓ Night Fairs

Mobile Scenarios

- ✓ Wedding Ceremonies
- ✓ Corporate Roadshows
- ✓ Emergency Broadcasting
- ✓ Temporary Stages
- ✓ Promotional Vehicles
- ✓ Mobile Performances

A Complete System for Every Scenario.

Whether it's indoor meetings, outdoor performances, or mobile events, it can be quickly deployed to deliver a stable and reliable audio solution.



CREATING THE BEST

SOUNDING THE WORLD

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