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## PN-6D Quick Start Guide

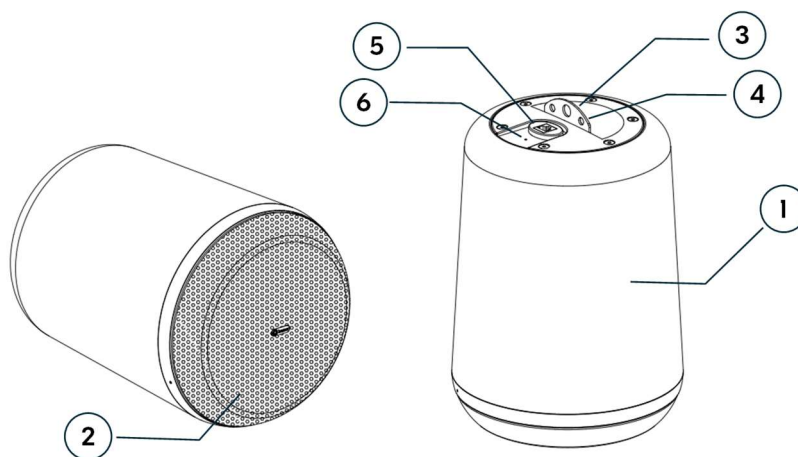
This guide helps you install and use your PN-6D for the first time.

Go to <http://www.kramerav.com/downloads/PN-6D> to download the latest user manual and check if firmware upgrades are available.

### Step 1: Check what's in the box

- ✔ 1 PN-6D 6.5", 2-way, PoE powered Dante pendant speaker
- ✔ 1 suspension cable kit
- ✔ 1 Quick start guide

### Step 2: Get to know your PN-6D



#	Feature	Function
1	Speaker	Speakers body
2	Speaker grill	Speaker's grill
3	Mounting bracket	Connecting the suspension cable
4	Safety anchor point	Secondary safety anchor points for securing a seismic restraint cable
5	RJ45 connector	PoE Ethernet connector
6	Factory Reset button	For resetting the DSP to default values

### Step 3: Key Features

- 6.5", 2-way, PoE powered Dante pendant speaker
- Built-in amplifier, DSP, and Dante audio networking
- Supports PoE++ / PoE+ / PoE (auto-negotiate)
- Power handling: 10W continuous / 30W peak
- Maximum SPL: Continuous 100dB SPL / Peak 105dB SPL
- Supports AES67 streams when enabled in Dante Controller
- Regulatory compliance: IEC62368(CB), CE LVD, UL62368-1, FCC/IC, BIS, RCM, RoHS, REACH, WEEE
- Available in white color
- Eco-friendly packaging

#### PN-6D Quick Start

Manufacturer: Kramer Israel  
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EU Importer: Kramer EMEA Netherlands  
 Stroombaan 16, The Garden 1181VX  
 Amstelveen  
[info\\_EMEA@kramerav.com](mailto:info_EMEA@kramerav.com)

P/N:  2900- 301907 QS

Rev:  1

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## Step 4: Achieving the Best Performance

For optimal performance, audio quality, and reliability of the Kramer PN-6D PoE Dante speaker, follow these cabling guidelines:

### Ethernet Cable Requirements

Use high-quality CAT6A or higher, S/FTP or U/FTP shielded, 23 AWG (or thicker) conductors for long runs, rated 60°C+, and Low Smoke Halogen Free (for plenum/in-wall).

### Recommended Kramer Cables

- **PC6A-LS508** CAT6A S/FTP Patch Cord (0.15–30m)
- **BC-DGKat7a23** CAT7a S/FTP Bulk Cable (23AWG, 100/305m)
- **BC-UNIKAT** CAT6A U/FTP Bulk Cable, Low Smoke & Halogen Free

### Installation Best Practices

- Keep cable length <100m
- Avoid tight bundling or coiling
- Route away from power lines, dimmers, ballasts
- Ensure proper termination and grounding for shielded cables

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## Step 5: Choosing the Best Location

- Plan the location of the speakers based on the designated listening area, the height of the ceiling and dispersion angle of the speakers.
- Ceiling Type Suitability: Ensure the ceiling is appropriate for mounting the speaker weight.
- Obstruction Check: Verify the mounting location is free of obstructions like electrical piping, AC ducts, or water lines.
- Ceiling Clearance: Avoid placing speakers too close to the ceiling to prevent sound distortion.
- Avoid Reflective Surfaces: Minimize placement near glass, tiles, or other reflective materials to reduce unwanted echo or reverb.

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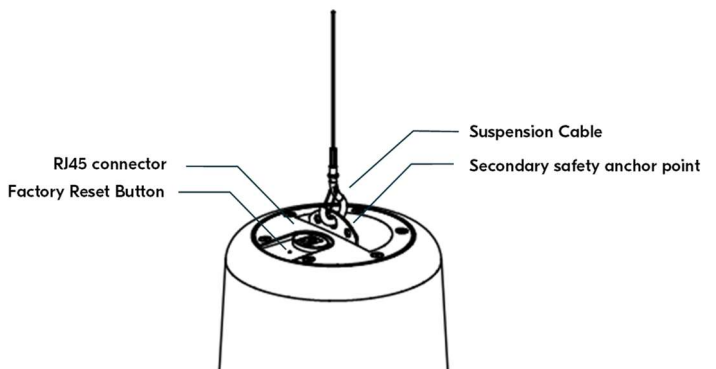
## Step 6: Unpacking

- Carefully remove the speaker and mounting accessories from the packaging.
- Inspect all components for damage before proceeding.
- Dispose of the packaging materials according to regulations.

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## Step 7: Mounting the Speaker

- **Step 1: Prepare Mounting Point**  
Choose a secure mounting location on the ceiling. Install a suitable ceiling hook, eye bolt, or other mounting hardware (not included) rated to support at least 5x the speaker's weight.
- **Step 2: Attach Suspension Cables**  
Use the included suspension cable kit to attach the speaker to the ceiling mount. Make sure the cables are firmly secured and evenly balanced.
- **Step 3: Adjust Height and Level**  
Adjust the length of the suspension cables as needed to position the speaker at the desired height and ensure it hangs level.



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## Step 8: Wiring the Speaker

Your speaker connects to a PoE/PoE+/PoE++ switch using a CAT cable for both network connectivity and power. Connect the CAT cable to the appropriate port on the switch and the RJ-45 connector on the speaker. Once connected, the LEDs on the RJ-45 connector will begin to blink, indicating an active connection.



Ensure the total power draw of all connected speakers stays within the PoE budget of the switch. Log in to the switch's management interface to confirm the available PoE capacity.

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## Step 9: Speaker setup

Your Dante speaker has a built-in DSP, mixer and amplifier. The speaker works out of the box without requiring any configuration. However, by using the **Kramer Speaker Manager** you can fine tune the configuration of the speaker (EQ, Low Pass Filter, High Pass Filter, Mixer and more).

The Dante speaker supports input from two channels and mixes them internally. By default, the speaker is configured to channel 1.

Please see this link for downloading the application (applicable for Windows only):

<https://kramer-speaker-manager.s3.us-east-1.amazonaws.com/updates/Kramer-Speaker-Manager-Setup.exe>

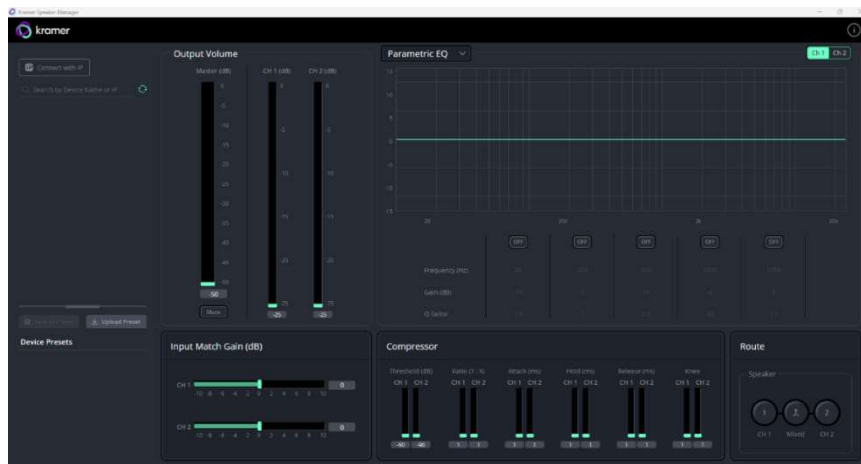


When launched with an active Internet connection, Kramer Speaker Manager automatically checks for updates and prompts you to install the latest version if available

Kramer Speaker Manager enables you to automatically discover Kramer PoE-powered Dante speakers and configure their DSP settings.

Ensure the following network settings are in place:

- **239.254.50.213:52123** – Multicast IP and port for speaker discovery
- **7000** – UDP port for device communication
- **22222** – Client port used by Kramer Speaker Manager
- Multicast traffic enabled in your network/switch configuration



For detailed instructions on the Kramer Speaker Manager, please refer to the PN-6D user's manual.

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## Step 10: Connecting to Dante Network

To integrate your Dante-enabled speaker into a Dante audio-over-IP system, follow these basic connection steps:

### Minimum Requirements

Before connecting, ensure the following:

- **Dante-compatible network switch** (Gigabit Ethernet recommended)
- **CAT5e or higher Ethernet cable**
- **Dante-enabled audio source or transmitter** (e.g., Dante audio interface, DSP, or mixing console)
- **Dante Controller software** installed on a PC/Mac (free download from Audinate: <https://www.audinate.com/products/software/dante-controller>)

For **Dante Network requirements** refer to Audinate WEB site:

<https://www.getdante.com/support/faq/which-network-ports-does-dante-use/>

## Network Switch Settings

Make sure your switch settings meet the following criteria:

- **Gigabit (1000 Mbps) speed** – Dante requires high bandwidth for low-latency, uncompressed audio.
- **Support for IGMP Snooping** – Essential for efficient multicast traffic handling, especially in larger systems.
- **Quality of Service (QoS)** – Helps prioritize Dante clock and audio traffic over other network traffic.
- **Non-blocking architecture** – Ensures full bandwidth on all ports simultaneously.
- **Fan-less or low-noise operation (optional)** – Recommended for noise-sensitive environments like meeting rooms or classrooms.



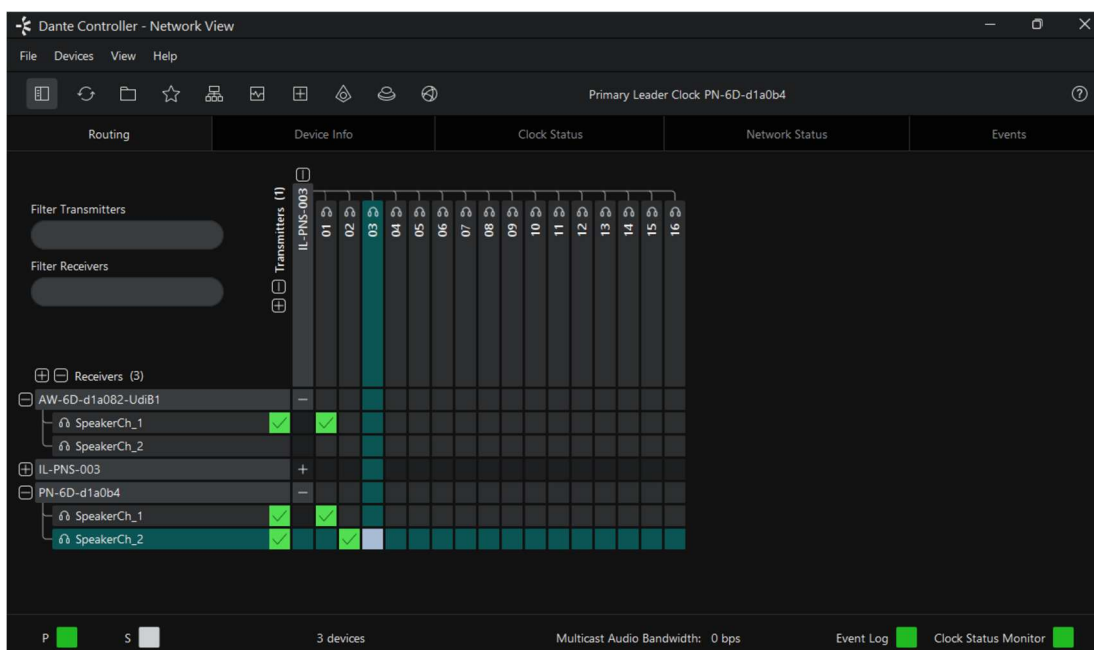
Avoid using unmanaged or low-cost consumer switches, as they may introduce latency or fail to route multicast Dante streams correctly.

## Connecting Your Speaker

- Connect the Ethernet cable from the switch to the RJ-45 connector in the speaker.
- Make sure the speaker is powered (LED in the RJ-45 will start blinking).
- Launch Dante Controller on your PC/Mac connected to the same network.
- Locate the speaker under the "Receivers" section. It will appear as PN-6D-XXXXXX (based on its device name).
- Patch one or two Dante channels from a source device to the speaker.



The speaker's default routing is to Channel 1, but you can assign Channel 2 or mix both using the Kramer Speaker Utility.



✓ Once connected and routed, audio will start streaming instantly with near-zero latency.

**i** *Tip:* Rename the speaker in Dante Controller for easier system identification.

**i** *Tip:* To find the speaker in the room, click the **“Find Me”** icon in Kramer Speaker Manager. The speaker will play a series of beeps to help you locate it.

