AW-6D Quick Start Guide

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

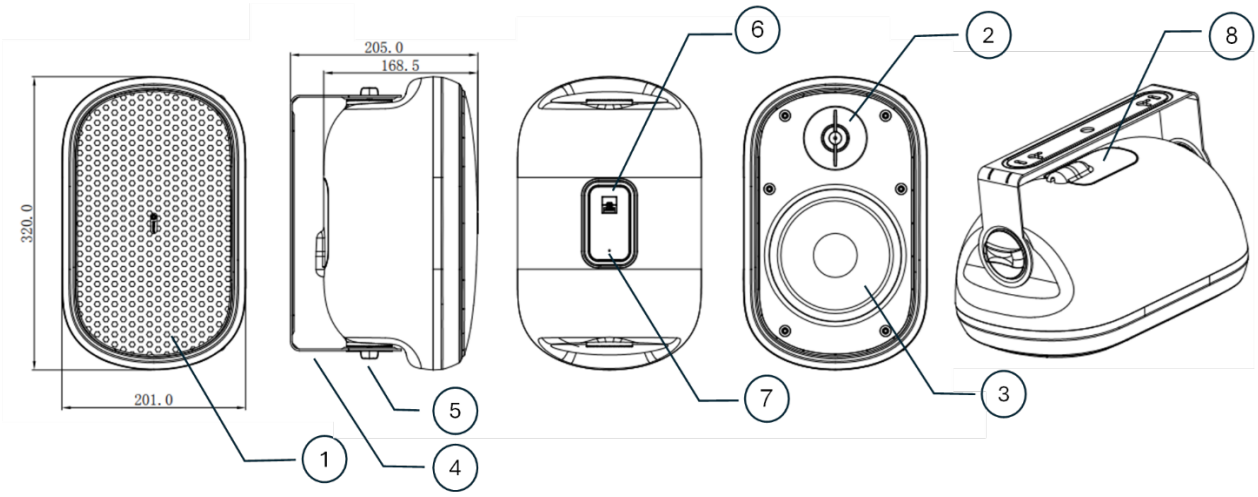
Go to http://www.kramerav.com/downloads/AW-6D to download the latest user manual and check if firmware upgrades are available.

Scan to go to website

Step 1: Check what's in the box

- 1 **AW-6D** All weather, 6.5", 2–way wall mounted PoE powered Dante speaker
- 1 mounting U-bracket
- 2 bracket knobs
- 1 Silicon cap
- 1 Quick start guide

Step 2: Get to know your AW-6D



#	Feature	Function
1	Grill	Speaker's Grill
2	Tweeter	Emits high frequency sound
3	Woofer Driver	Emits low frequency sound
4	U-Bracket	Use to mount the speaker onto a wall (allowing left/right rotation)
5	U-Bracket knobs	Use to attach the U-bracket to the speaker (two knobs per bracket)
6	RJ45 connector	PoE Ethernet connector
7	Factory Reset button	For resetting the DSP to default values
8	Protective Cover	Silicon cap for protecting the Ethernet connector and factory reset button

Step 3: Key Features

- IP-66 certified, UL1480A compliant
- Supports PoE++/PoE+/PoE (auto-negotiate)
- Built-in mixer, DSP, and amplifier for two-channel mixing, parametric EQ, High pass and low pass filters, input compressor, output limiter and advanced power settings
- Features a built-in "Find Me" tone, making it easy to identify and locate individual speakers during installation or maintenance.

AW-6D Quick Start
Manufacturer: Kramer Israel
2 Negev St. Airport City 7019900
+972 (0)73-265-0200
info_il@kramerav.com

EU Importer: Kramer EMEA Netherlands
Stroombaan 16, The Garden 1181VX
Amstelveen
info_EMEA@kramerav.com

P/N: 2900-301875QS Rev: 1

- Power handling: 10W continuous / 30W peak
- Sound Pressure Level (SPL):
  - Sensitivity (1W@1m, free field): 90dB SPL
  - Maximum SPL: Continuous: 100dB SPL / Peak: 105dB SPL
- Regulatory compliance:
  - IEC62368(CB) / CE LVD, UL62368-1
  - FCC/IC, BIS, RCM
  - RoHS, REACH, WEEE

Step 4: Achieving the Best Performance

To ensure optimal power delivery, audio performance, and long-term reliability of the Kramer AW-6D PoE-powered Dante speaker, follow these cabling best practices:

Use high-quality Ethernet Cables

For all PoE+ and PoE++ installations, it is essential to use high-quality Ethernet cables that are designed to handle higher power, minimize signal degradation and electro-magnetic interference.

Kramer recommends that CAT cables used for PoE Dante speakers should meet the following criteria:

- Use Category 6A cables or higher
- Use S/FTP or U/FTP shielded cables
- For long cable runs use 23 AWG conductors or thicker
- Use cables rated for 60°C or higher
- Use Low Smoke Halogen free rated (mainly for plenum and in-wall installations)

Kramer recommended cables:

- **PC6A-LS508 -** CAT6A S/FTP 500MHz 4x2x26AWG Patch Cord Low Smoke & Halogen Free available from 0.15m to 30m
- **BC-DGKat7a23** - Four–Pair CAT 7a S/FTP Data Bulk Cable (23AWG) – available in 100m and 305m bulks
- **BC-UNIKAT** CAT6A U/FTP Video & LAN Bulk Cable — Low Smoke & Halogen Free

Installation Best Practices

- Cable Length Limit: Keep total cable length between the PoE switch and the speaker under 100 meters
- Avoid Tight Bundling & Coiling
- Route Away from Electrical Noise: Do not run Ethernet cables parallel to power lines or close to lighting dimmers and ballasts
- Ensure Proper Termination & Grounding: Especially for shielded cables (S/FTP or Cat7A), ensure grounding is done correctly at one end

Step 5: Choosing the Best Location

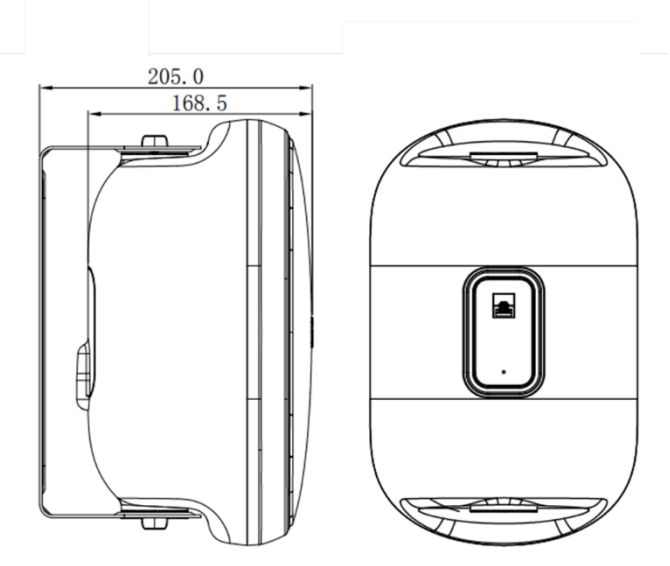
- Plan the location of the speakers based on the designated listening area, the height of the ceiling and dispersion angle of the speakers.
- Wall Type Suitability: Ensure the wall is appropriate for supporting the speaker’s weight.
- Obstruction Check: Verify the mounting location is free of obstructions 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.

Step 6: Unpacking

1. Carefully remove the speaker and bracket from the packaging.
2. Inspect all components for damage before proceeding.
3. Dispose of the packaging materials according to regulations.

Step 7: Mounting the Speaker

1. **Prepare the speaker cable** – Route the cable from behind and slightly below the RJ-45 connector (angled at 45°) for easier connection.
2. **Install the U-bracket** – Mount in the designated wall location. Use the marked holes for either horizontal or vertical installation.
3. **Outdoor installation tip** – Mount vertically with the RJ-45 connector pointing downward toward the ground. Ensure the silicon protective cover is in place.
4. **Attach the speaker** – Secure it to the U-bracket using the supplied knobs (5).
5. **Adjust and lock** – Set the desired angle and tighten the knobs to secure.



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.

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):

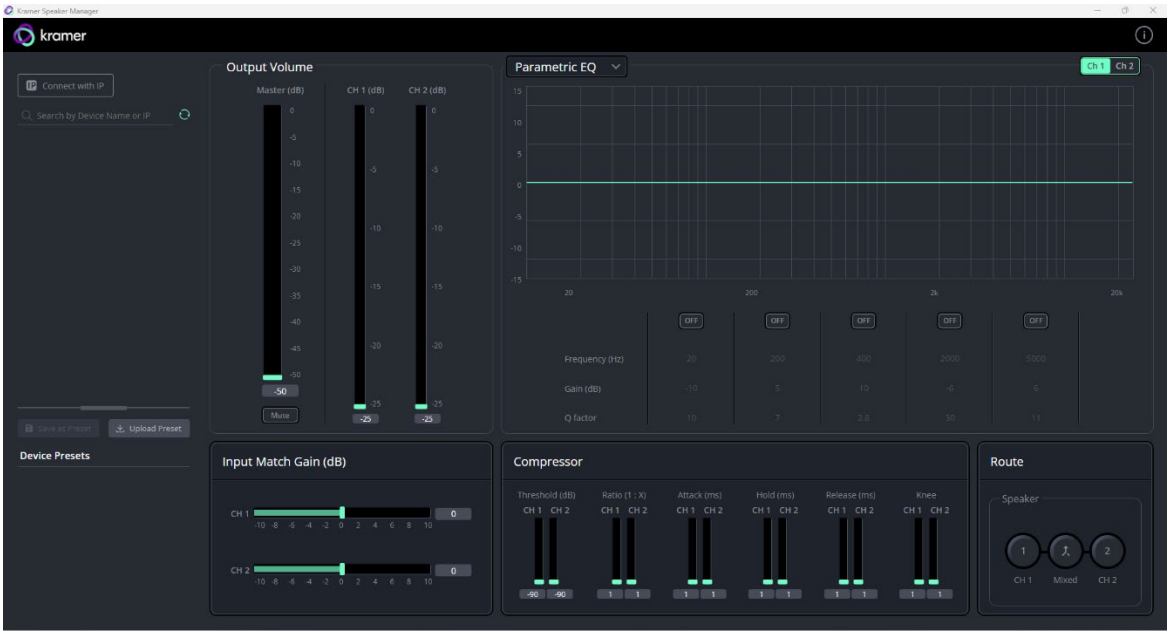
https://kramer-speaker-manager.s3.us-east-1.amazonaws.com/updates/Kramer-Speaker-Manager-Setup.exe

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 AW-6D user's manual.

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:

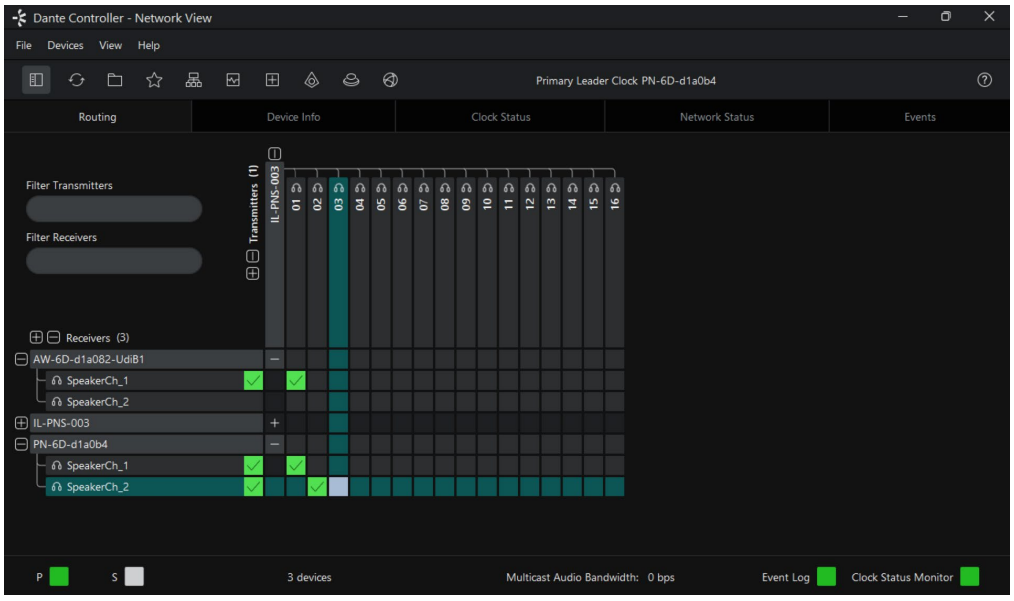
- **Gigabit (1000 Mbps) speed –** Dante requires high bandwidth for low-latency, uncompressed audio.
- **Support for IGMP Snooping –** Essential for efficient multicast traffic handling, especially in larger systems.
- **Quality of Service (QoS) –** Helps prioritize Dante clock and audio traffic over 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 AW-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.

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

ℹ️ *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.