

Voice2CAD User Manual

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Introduction

Voice2CAD is a speech recognition software designed to streamline CAD workflows by allowing users to execute commands via voice. This manual will guide you through installation, setup, and usage of the software, including license activation, microphone configuration, language settings, voice training, command creation, confidence threshold management, and troubleshooting.

Getting Started

System Requirements

- **Operating System:** Windows (with speech recognition support)
- **Microphone:** Built-in or external microphone
- **Internet:** Required for license activation and updates
- **Excel:** For importing command templates (optional)

Installation

1. Download the latest version of Voice2CAD from the official website.
2. Run the installer and follow the on-screen instructions.
3. Launch the application after installation.

Activating a License

1. **Launch Voice2CAD:** Open the application. On first run, you'll see the End User License Agreement (EULA).
2. **Accept EULA:** Read the agreement in the EULA window, check "I have read and agree to the terms," and click **Accept**. The application will close if you decline.

3. **Navigate to Subscription Page:** After accepting the EULA, the main window opens to the **Import** page. Click **Subscription** in the left navigation panel.
4. **Enter Email:** In the "License Management" section, input your email address in the **Email** field.
5. **Activate License:** Click **Activate License**. If you've purchased a license, the software will validate it with the server.
 - **Success:** The "Status" field updates to "License Active" or "Trial Active," showing details like "Licensed To" and "Days Remaining."
 - **Failure:** If the license isn't found, you'll see "License not found." Ensure your email matches your purchase or click **Purchase License** to buy one.
6. **Offline Mode:** If internet is unavailable, Voice2CAD may use cached license data if previously activated.

Setting Up Your Microphone

1. **Check Hardware:** Ensure your microphone is connected (internal or external).
2. **Windows Microphone Setup:**
 - Go to **Control Panel > Sound > Recording**.
 - Select your microphone, click **Set Default**, then **Properties**.
 - In the **Levels** tab, adjust the microphone volume (start at 80-100).
 - Test by speaking; the green bars should move.
3. **Voice2CAD Initialization:** On startup, Voice2CAD checks microphone compatibility. If it fails, a warning appears: "Speech recognition failed to initialize. Please check your microphone settings."

Understanding Confidence Threshold and Command Overrides

Confidence Threshold in Settings

The **Confidence Threshold** determines how certain the speech recognition engine must be before executing a voice command. It's adjustable in the **Settings** page and balances accuracy and responsiveness.

What It Does

- **Range:** 0% to 100%.
- **Purpose:** Sets the minimum confidence level for command execution. For example:
 - At 80%, the engine must be 80% sure it heard "Draw Line" correctly.
 - At 50%, it's less strict, allowing lower certainty.
- **Default:** Typically 70%, adjustable based on your needs.

How to Adjust It

1. **Navigate to Settings:** Click **Settings** in the left navigation panel.
2. **Locate Confidence Threshold:** Scroll to the "Speech Recognition" section.
3. **Adjust Slider:** Move the slider left (lower) or right (higher).
 - **Lower (e.g., 50%):** Useful for accents or noisy environments; increases recognition but may add false positives.
 - **Higher (e.g., 90%):** Ensures accuracy; reduces misrecognitions but may miss valid commands.
4. **Check Value:** The percentage is displayed (e.g., "75%").
5. **Test:** Say a command (e.g., "Start Listening") to test the new setting.

When to Change It

- **Foreign Accent:** Lower it if your accent causes issues.
- **Background Noise:** Increase it to reduce false triggers.
- **Testing:** Start low, then raise for precision.

Double-Clicking Commands in History to Override Confidence Threshold

You can set custom confidence thresholds for individual commands via the **History** page.

What It Does

- **Custom Threshold:** Overrides the global threshold for a specific command.
- **Access:** Double-click a command in the History list.

How to Use It

1. **Go to History:** Click **History** in the left panel.
2. **View Entries:** See past commands with details like:
 - Command name (e.g., "Draw Line")
 - Timestamp
 - Actions
 - Confidence (e.g., "Confidence: 82%")
 - Threshold Used (e.g., "Global threshold: 70%")
 - Status (e.g., "Executed")
3. **Double-Click a Command:** Select an entry and double-click.
4. **Threshold Override Window:**
 - **Title:** "Override Threshold for [Command]"
 - **Current Threshold:** Displays current value (e.g., "70.0%")
 - **Input Box:** Pre-filled with current threshold
5. **Set a New Threshold:**
 - Enter a number (0-100, e.g., "85.0").
 - Click **OK** to save, **Clear Threshold** to revert, or **Cancel** to exit.
6. **Validation:** Invalid values (e.g., "150") trigger a warning.

Setting Up Language Based on Regional Settings

1. **Default Language:** Voice2CAD uses your Windows regional settings.
2. **Check Language Pack:**
 - Look at "Language: [Name]" in the app.
 - If "(Not Supported)," install the pack in **Settings > Time & Language > Speech**.
3. **Restart Voice2CAD:** Reopen after installing the pack.

Setting Up Windows for a Foreign Accent

1. **Language Pack:** Match your primary language (e.g., English for an Australian accent).

2. **Voice Training:** Train Windows Speech Recognition (see below).
3. **Adjust Confidence Threshold:** Lower it in **Settings** (e.g., 60%) if needed.

Training Your Voice with Windows Speech Recognition

1. **Open Speech Training:** Go to **Control Panel > Ease of Access > Speech Recognition**, click **Train your computer**.
2. **Follow Prompts:** Read sentences aloud for 10-15 minutes.
3. **Repeat:** Do multiple sessions for accents.
4. **Test:** Say "Start Listening" in Voice2CAD to check improvement.

Creating a Template and Understanding Identifiers

Voice2CAD uses Excel templates to define voice commands. Each command has a **Voice Phrase** and **Actions**.

Template Structure

- **Column A:** Voice Phrase (e.g., "Open Website")
- **Column B onwards:** Action 1, Action 2, etc.

Identifiers

- **None:** Single key press (e.g., a, enter)
- **~:** Types text (e.g., ~Line)
- **#:** Pastes text via clipboard (e.g., #LongText)
- *****: Opens a path (e.g., *https://voice2cad.com)
- **HOLD[key][seconds]:** Holds a key (e.g., HOLDCTRL1)
- **!:** Delays in milliseconds (e.g., !20)

Creating a Template

1. Open Excel and create a spreadsheet.

2. Add headers: Voice Phrase (A1), Action 1 (B1), etc.

3. Example:

Voice Phrase	Action 1	Action 2	Action 3
Draw Line	~Line	!500	enter
New File	HOLDCTRL1	n	
Open Website	*https://voice2cad.com	!1000	enter

Creating Macros

Macros are multi-step commands in the template.

Example Macro

Voice Phrase	Action 1	Action 2	Action 3
Start Drawing	~Line	!1000	~10,20

Importing an Excel Sheet

1. **Go to Import Page:** Click **Import** in the app.
2. **Browse File:** Select your .xlsx file.
3. **Import Commands:** Click **Import** to load commands.

Turning On the Microphone and Testing

1. **Enable Microphone:** Ensure setup is complete.
2. **Start Listening:** Click **Start Listening** in the app.
3. **Test Commands:** Say a command and check **History**.
4. **Stop Listening:** Say "Stop Listening" or click the button.

Frequently Asked Questions (FAQs)

Why can't I activate my license?

Ensure your email matches your purchase and you're online. Contact support if issues persist.

What if my voice isn't recognized?

Train Windows Speech Recognition and lower the Confidence Threshold.

Can I use Voice2CAD offline?

Yes, if previously activated, but some features require internet.

How do I update the software?

If "Software Disabled" appears, download the latest version.

What does "Confidence Threshold" do?

It sets the minimum confidence level (0-100%) for a command to execute.

Troubleshooting

- **"Speech recognition failed"**: Check microphone and restart.
- **"License not found"**: Verify email and connection.
- **Commands not working**: Ensure imported and listening is active.

Additional Tips

- Use **History** to set custom thresholds.
- Enable "High Priority Mode" in **Settings** for faster response.
- Contact support at joseph@voice2cad.com.

Enjoy your voice-controlled CAD experience with Voice2CAD!