

JARDesign Group

# CoPilot plugin for ZIBO-737

## (how to Install and Use)

### features:

- + animated 3d CoPilot model
- + recognize and execute voice/menu/widget commands
- + speak
- + read checklists
- + operate with Events (based on flight parameters and situation)
- + execute SOP (Normal Procedures, Limited)



# LICENSE AGREEMENT

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5. REFUND POLICY: As you have ability to use DEMO version and check is it work or not BEFORE purchase, NO REFUND may be given.
6. Serial key may be activated with one aircraft installed for only one Computer ID. After first activation your serial key may be used with the same aircraft at the same computer (detected as Computer ID).

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## STEP-BY-STEP

1. Setup speech/recognition engine at your computer (read below)
2. Copy CoPilot plugin files to your compatible aircraft "/plugins/" folder (read below)
3. Load aircraft and setup plugin.
4. Check what you see copilot in cockpit, it animated, speak and recognize your voice command.
5. Use.

# SETUP SPEECH RECOGNITION (WINDOWS 10)

Please be sure what US English language pack is already installed and English selected as Windows display language

The image shows the Windows 10 Settings application. In the left-hand navigation pane, the 'Settings' title is circled in pink. Below it, the 'Home' icon is visible. A search bar labeled 'Find a setting' is present. Under the 'Time & Language' section, which is underlined in pink, there are three options: 'Date & time', 'Region & language', and 'Speech'. Pink arrows point from 'Speech' to the main content area and from 'Region & language' to the 'Speech language' dropdown menu. The main content area is titled 'Speech' and contains the following settings:

- Speech language**: Choose the language you speak with your device. The dropdown menu is set to 'English (United States)'.
- Recognize non-native accents for this language
- Text-to-speech**: Change the default voice for apps.
  - Voice**: The dropdown menu is set to 'Microsoft David'.
  - Speed**: A slider control is shown, currently positioned at approximately 75%.
  - Listen to voice sample**: A button labeled 'Preview voice' is visible.
- Microphone**: Set up your mic for speech recognition. A button labeled 'Get started' is visible.

Please select English language for Recognition, run voice preview, setup microphone.

Settings

Home

Find a setting

**Time & Language**

Date & time

**Region & language**

Speech

## Region & language

### Country or region

Windows and apps might use your country or region to give you local content

Russia

### Languages

Windows display language

Windows features like Settings and File Explorer will appear in this language.

English (United States)

### Preferred languages

Apps and websites will appear in the first language in the list that they support.

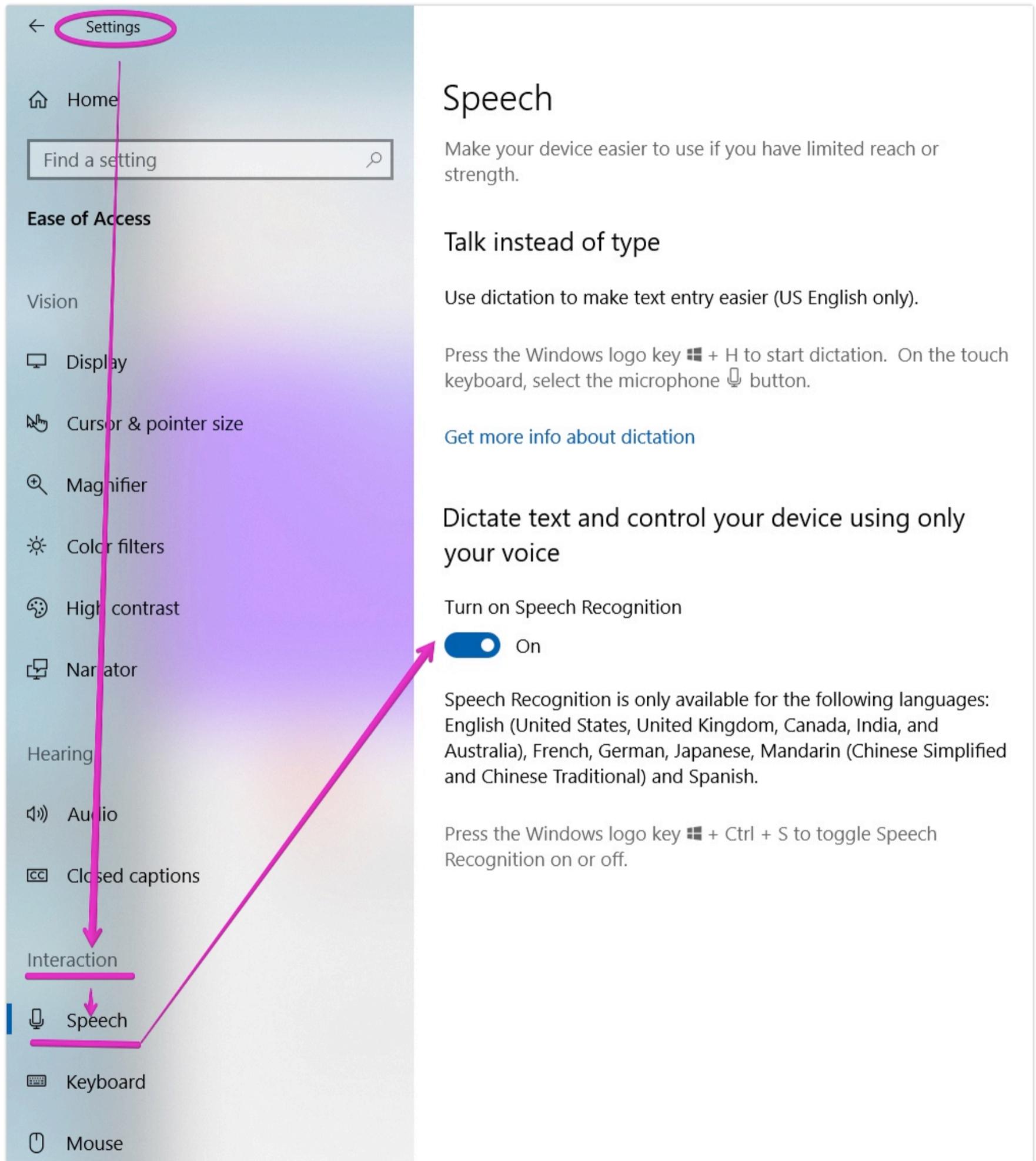
+ Add a language

English (United States)  
Windows display language

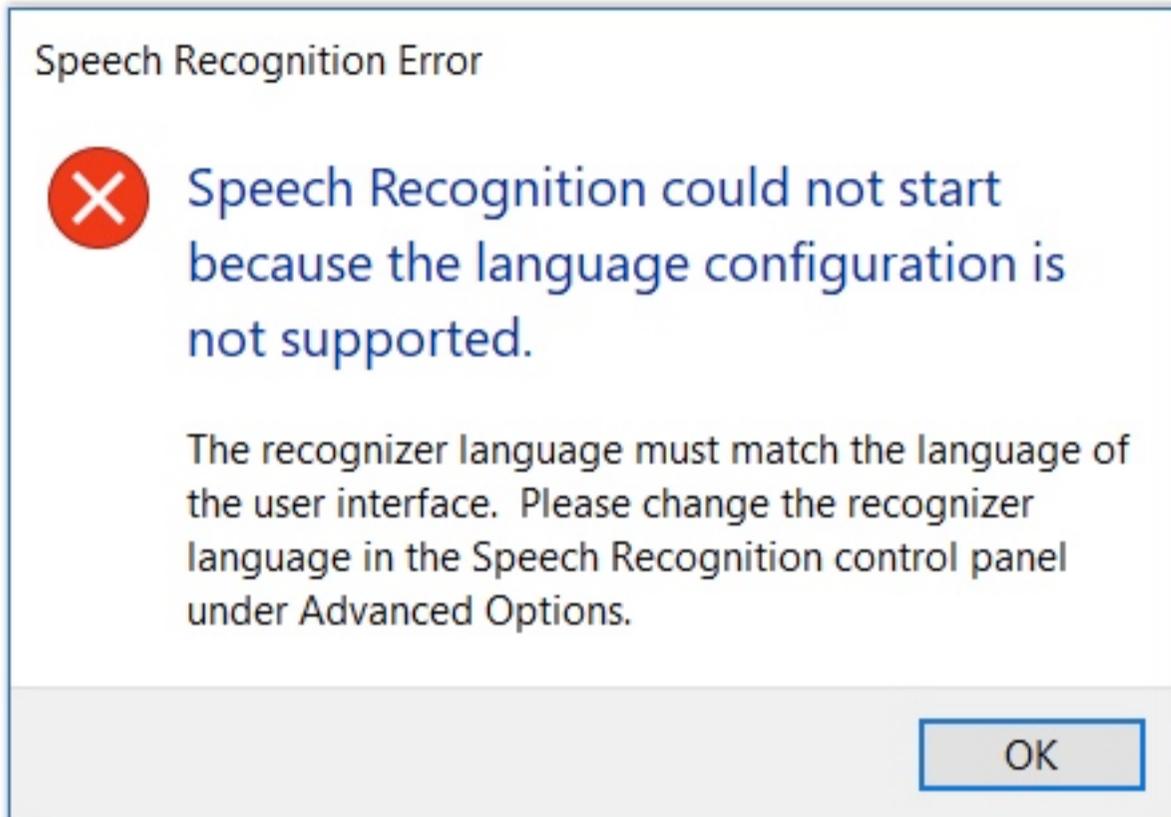
Русский  
Language pack installed

**Add English if not exist**

Next turn recognition On (You may skip this step if you have Non-English interface at your Windows)



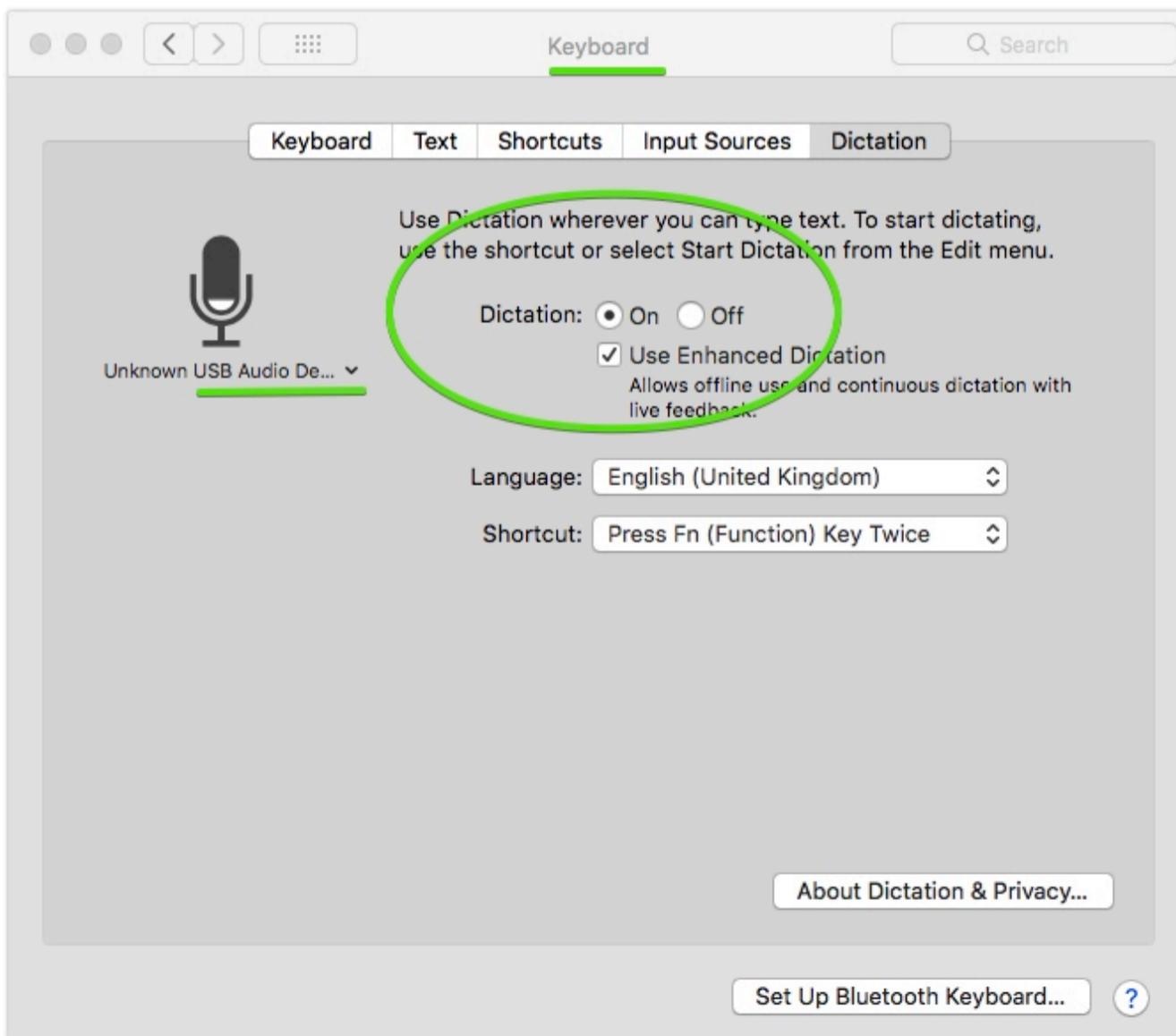
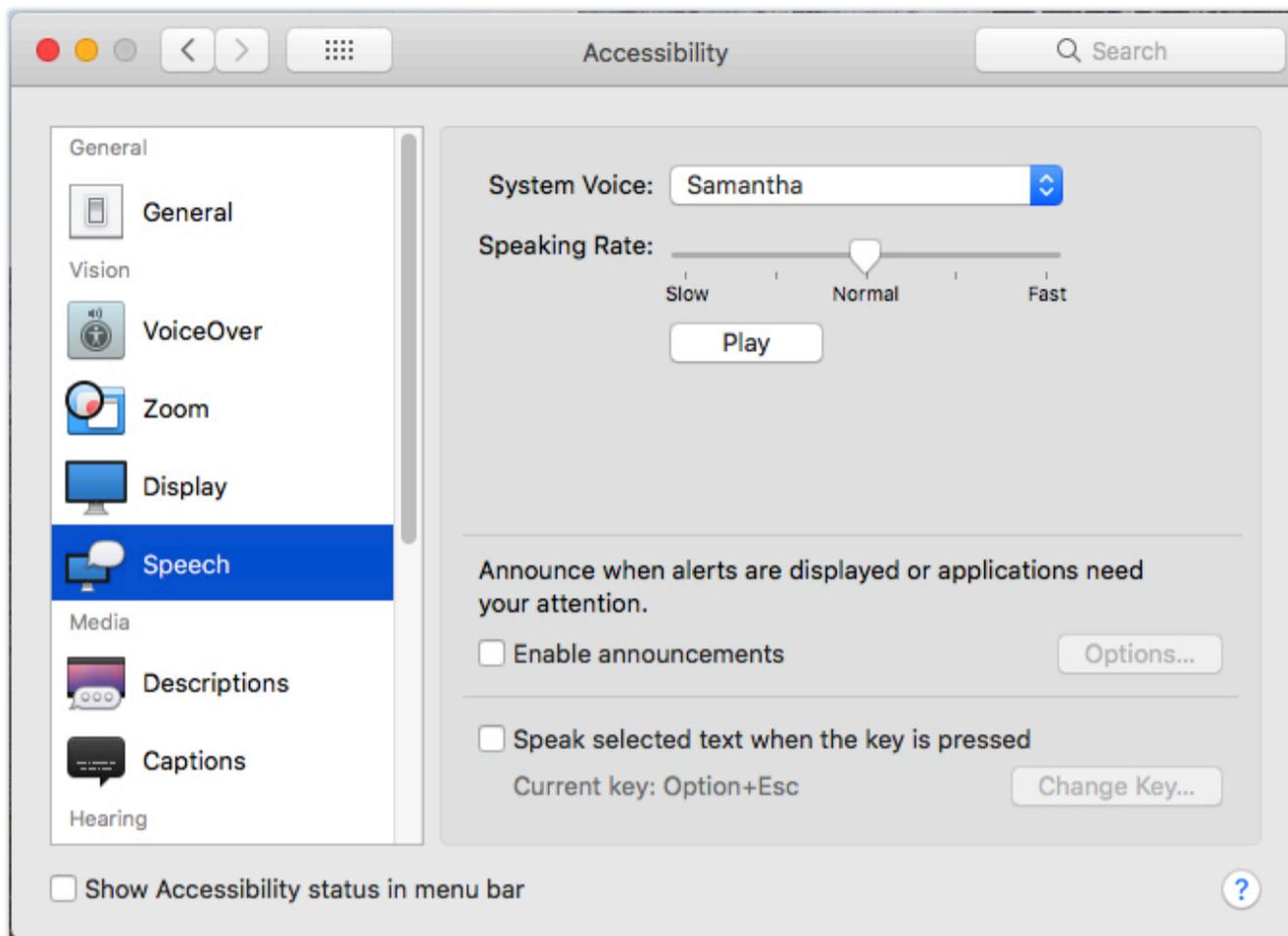
If you will get this error, you need setup English as user interface language (Windows display language) and English as your recognition language (language you speak with your device) and reload computer.



**Please use this basic manual if need:**

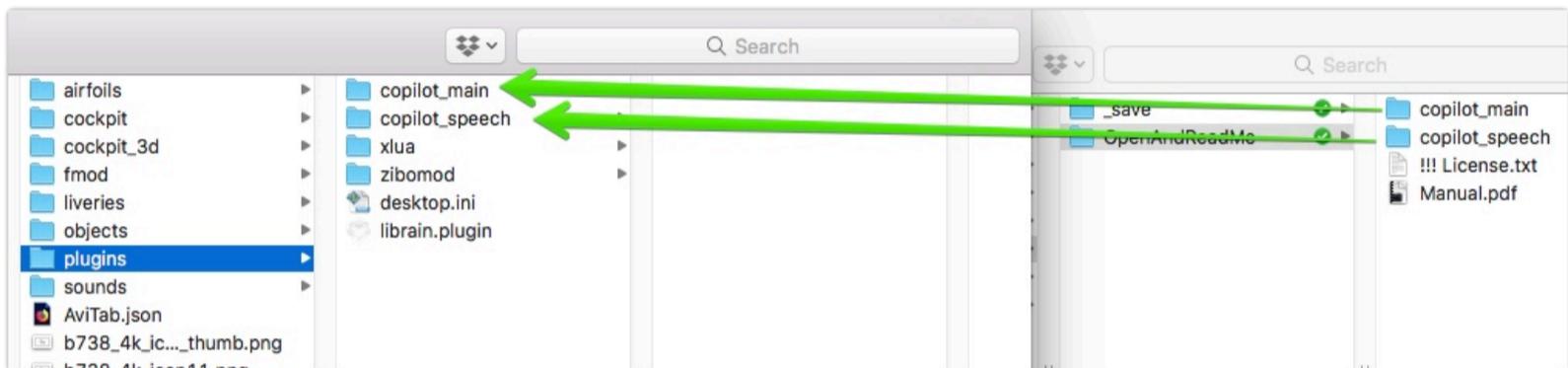
<https://www.windowcentral.com/how-set-speech-recognition-windows-10>

# SETUP SPEECH / RECOGNITION (MAC OS)



## INSTALL PLUGIN

1. Find your aircraft Zibo 737 plugins folder inside ../X-Plane\_11/Aircraft/Zibo\_737/plugins/ or path like this.
2. UnZip copilot distributive and Put "copilot\_main" and "copilot\_speech" folders from your ZIP pack to "../Zibo\_737/plugins/" folder



3. Run X-Plane and load Zibo\_737. Select "Setup" to complete installation. Obj file will be update.
4. Reload aircraft

## HARDWARE SETUP

For voice input - **You need** to have microphone or headset to use this plugin. Speech recognition should be setup and checked on your OS before copilot plugin installation.

For mouse click input - **You need** setup your Windows/MACOS speech settings only and skip voice recognition setup.

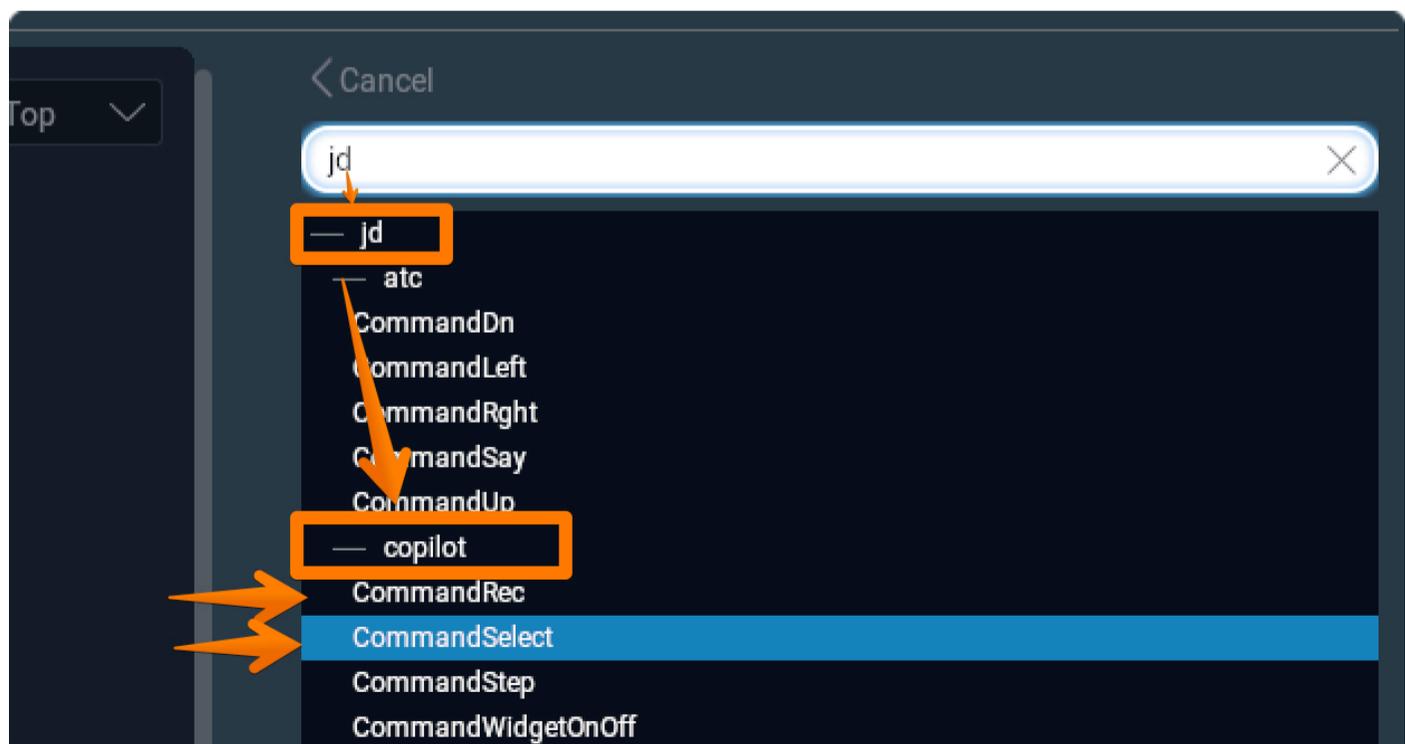
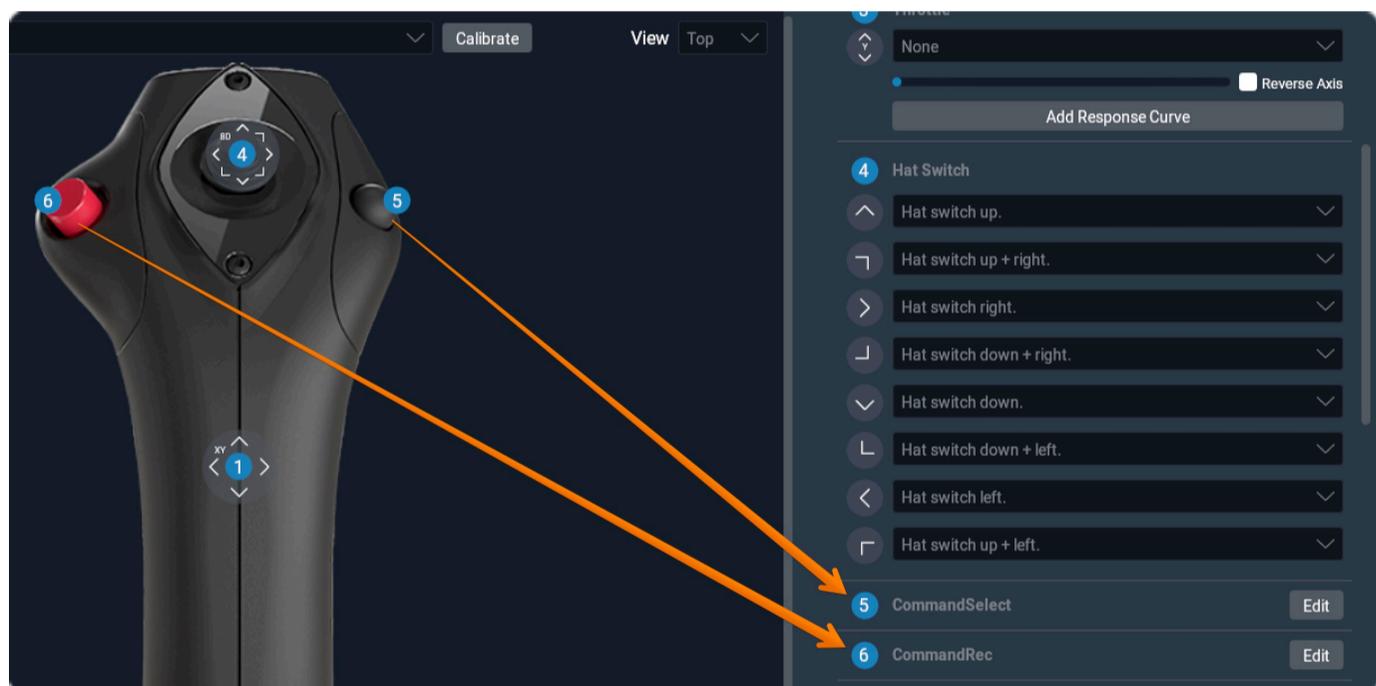
# SETUP

For voice input - **You need** to have microphone or headset to use this plugin. Speech recognition should be setup and checked on your OS before copilot plugin installation.

For mouse/button click input - **You need** setup your Windows/MACOS speech settings only and skip voice recognition setup.

Open your X-Plane joystick settings and **assign**:

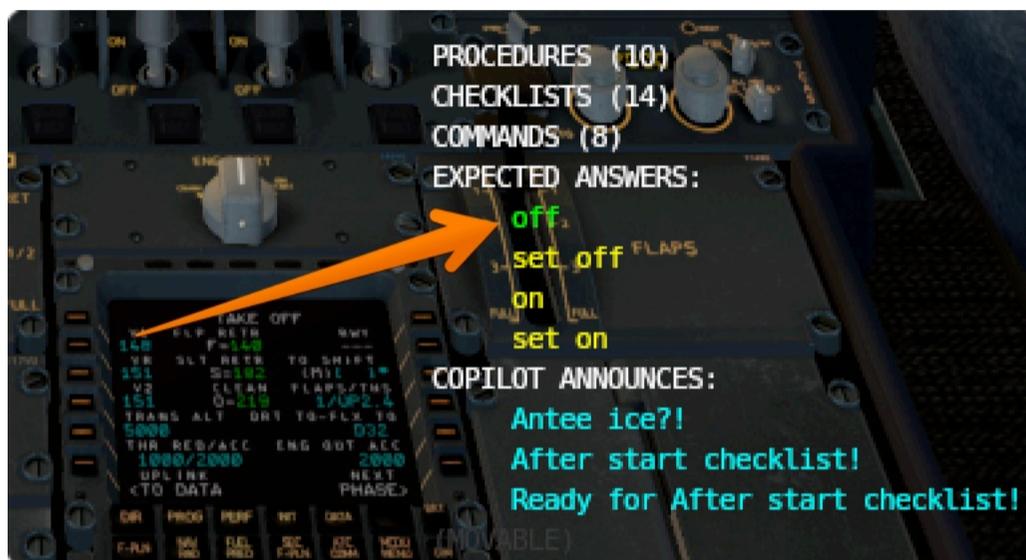
- one joystick button to jd/copilot/**CommandSelect** (for command selection)
- one joystick button to jd/copilot/**CommandRec** (for voice recognition)



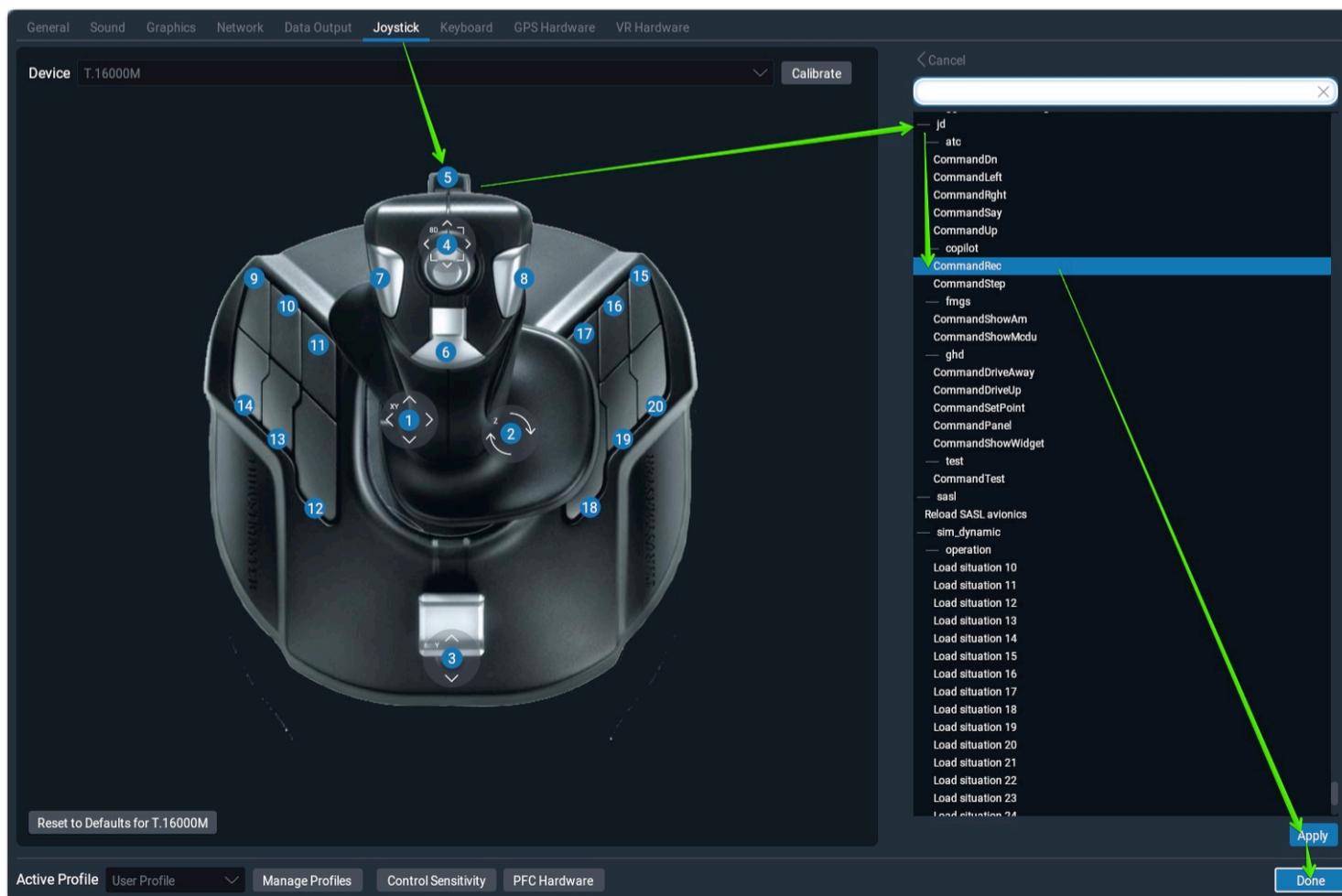
# HOW TO USE

You may speak with CoPilot via voice or select commands via Menu or select command via widget. When you run checklist - expected answers (clickable) will be indicated in yellow.

You may click it with mouse or use Select button. Short click on Select button will change selected command. Long tap will confirm selected command.

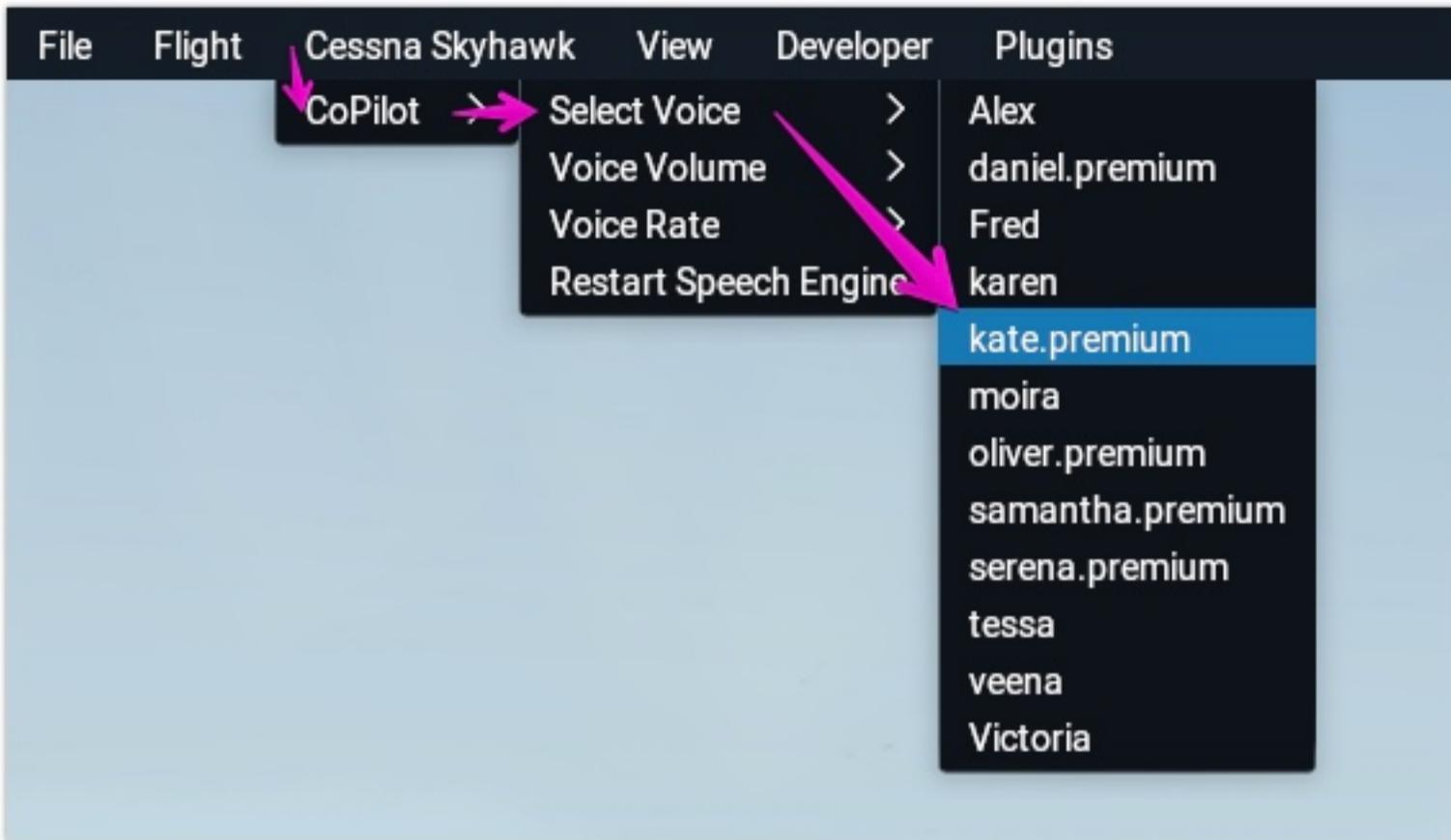


If you prefer voice control, you need setup special joystick (sure, keyboard may be used too) button to jd/CommandRec.



You may look at CoPilot, hold this joystick button and say something like "Hello!" Typical pattern - press the button, say the text, release the button.

You can change speech parameters using Menu, like this:



CoPilot widget have movable area ("MOVABLE" text in grey color) - You may use it to change widget position on the screen.



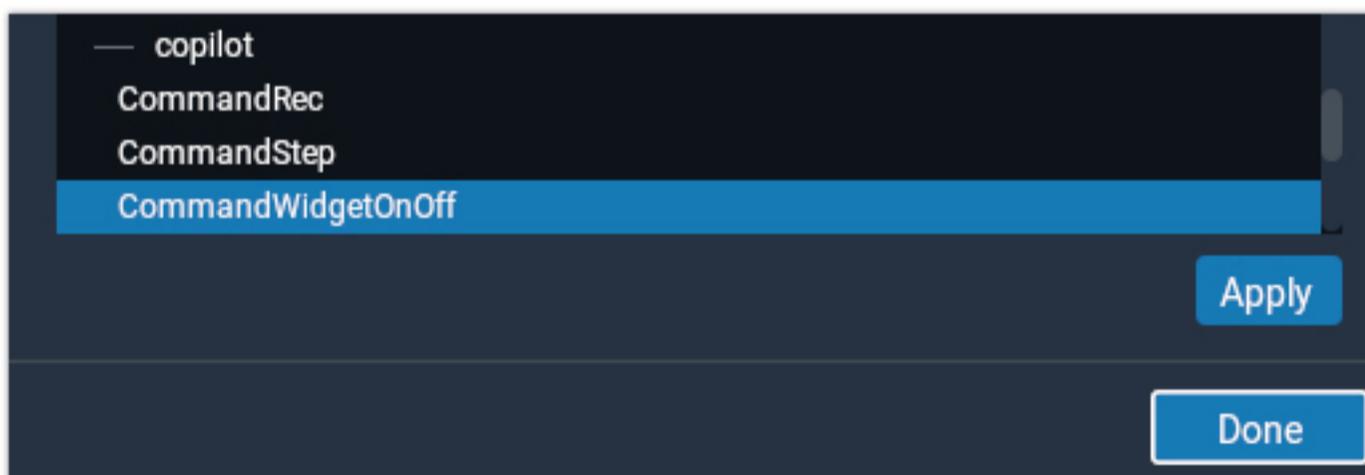
# HOW TO KNOW WHAT COMMANDS MAY BE USED

1. Use Menu -> CoPilot -> Commands to see full list of commands what may be activated by voice, by this menu or by widget menu.



## WIDGET

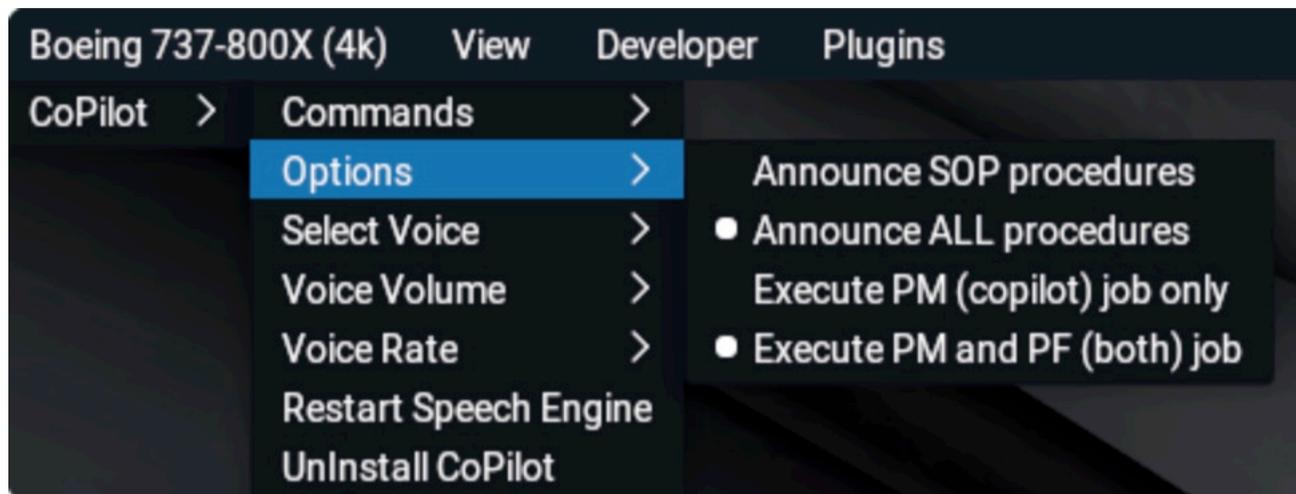
Widget may show you a shortlist of commands for actual flight phase. Sure, any command may be used in any time by menu or by voice input. You may show and hide widget using this command (assign it to your keyboard or joystick):



You may change widget position using "MOVABLE" zone:

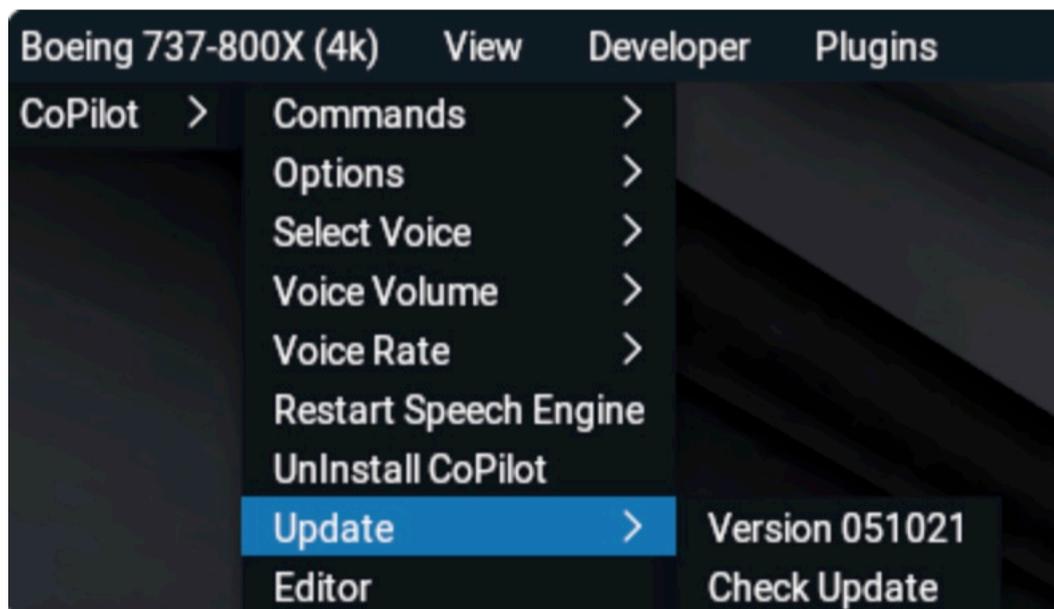
## REALISM OPTIONS

You may select some realism options and allow CoPilot to execute only First Officer job or to do some more pilot procedures:



## HOW TO CHECK VERSION AND UPDATE

Please use Menu->Update to know actual version and click on Check Update to redirect JARDesign Board, where you can check more fresh version:



## HOW TO UNINSTALL PLUGIN

1. Use Menu -> Uninstall CoPilot. Reload aircraft. CoPilot not work more.
2. Delete "copilot\_main" and "copilot\_speech" folders from "../Zibo\_737/plugins/" folder

**PRODUCT WEBPAGE:**

<http://www.jardesign.org>

**SUPPORT**

<http://www.support.jardesign.org>

# NORMAL CHECKLIST (EXAMPLE)

JD-CPL-737	NORMAL CHECKLIST	B737-800
<b>PREFLIGHT</b>		
Voice Recorder.....	ON	CM1
Oxygen.....	TESTED, 100%	BOTH
<b>NAVIGATION &amp; DISPLAY Switches...</b>		
	NORMAL, AUTO	CM2
Window Heat.....	ON	CM2
Pressurization Mode Selector .....	AUTO	CM2
Flight Instruments... HDG __, Altimeter __		BOTH
Parking Brake.....	SET, Pressure Normal	CM1
Engine Start Levers .....	CUTOFF	CM1
<b>BEFORE START</b>		
Papers .....	ABOARD	CM1
Flight Deck Door.....	Closed and Locked	CM2
Fuel.....	__ KGS	CM1
	PUMPS ON	CM2
Passenger Signs .....	ON	CM2
Windows .....	LOCKED	BOTH
MCP .....	V2 __, HDG __, ALT __	CM1
Takeoff Speeds.....	V1 __, VR __, V2 __	BOTH
CDU Preflight.....	COMPLETED	BOTH
Rudder and Aileron Trim ...	Free & Zero	CM1
Taxi and TO Briefing .....	COMPLETED	CM1
Anti Collision Light.....	ON	CM2
<b>BEFORE TAXI</b>		
Generators .....	ON	CM2
Probe Heat.....	ON	CM2
Anti-Ice .....	__	CM2
Isolation Valve .....	AUTO	CM2
Engine Start Switches.....	CONT	CM2
Recall.....	CHECKED	BOTH
Autobrake.....	RTO	CM2
Engine Start Levers .....	IDLE DETENT	CM1
Flight Controls.....	CHECKED	BOTH
Flaps....	__, GREEN LIGHT, DETENT	BOTH
Ground Equipment .....	CLEAR	BOTH
<b>BEFORE TAKEOFF</b>		
Flaps....	__, GREEN LIGHT, DETENT	BOTH
Stabilizer Trim.....	__ UNITS	CM2
Transponder.....	TA/RA	CM2
<b>AFTER TAKEOFF</b>		
Engine Bleeds.....	ON	PM
Packs.....	AUTO	PM
Landing Gear .....	UP and OFF	PM
Flaps .....	UP, NO LIGHTS, DETENT	PM
Altimeters .....	STD, X-CHECKED	BOTH
<b>DESCENT</b>		
Pressurization.....	LAND ALT __	PF
Recall.....	CHECKED	PF
Autobrake .....	__	PF
Landing Data..Vref __, MINIMUMS __		BOTH
Approach Briefing .....	COMPLETED	PF
<b>APPROACH</b>		
Altimeters..	__ hPa(In), X-CHECKED	BOTH
<b>LANDING</b>		
Engine Start Switches.....	CONT	PF
Speed Brake.....	ARMED	PF
Landing Gear .....	DOWN	PF
Flaps .....	__, GREEN LIGHT	PF
<b>SHUTDOWN</b>		
Fuel Pumps .....	As needed	CM2
Probe Heat .....	OFF	CM2
Hydraulic Panel .....	SET	CM2
Flaps .....	UP	CM2
Parking Brake .....	__	CM1
Engine Start Levers.....	CUTOFF	CM1
Weather Radar .....	OFF	BOTH
IRS Mode Selectors .....	OFF	CM2
<b>SECURE</b>		
Fuel Pumps .....	As required	CM2
Emergency Exit Lights .....	OFF	CM2
Window Heat.....	OFF	CM2
Packs.....	OFF	CM2
APU Bleed.....	OFF	CM2
Lights.....	OFF	CM2
APU / EXT Power .....	As required	CM2
Battery Switch .....	As required	CM2