Pilot2ATC® User Guide

Part 1: Installation, Setup + Troubleshooting

Pilot2ATC® User Guide

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Overview

P2A is a companion Windows® application for use with any flight simulator (SIM) compatible with FSUIPC (Microsoft® Flight Simulator X, Prepar3D®) or XPUIPC (X-Plane). It provides 2-way voice radio communication between you and simulated ATC Controllers, making your flight simulator experience much more engaging and providing an opportunity to learn ATC radio procedures without having to "go live" on-line.

P2A also provides numerous other capabilities intended to make your flight more enjoyable and realistic:
- VFR and IFR Flight Planning – including Airways, SIDs, STARs and Approaches;
- Moving Maps (Worldwide Satellite, Street, Hi and Low IFR Charts, Topographical maps and US VFR Sectionals);
- Airport Diagrams and Approach Plates (US Only);
- PDF File viewer view any Diagram or Approach Plate you can download to your PC, enabling global coverage for charts and approach plates, etc.;
- Built-in browser capability for worldwide airport and approach plates;
- Airport Information;
- "Glass" Radio stack with Frequency Finder;
- Real Time Weather;
- Selectable Radio Chatter;
- Automatic Pilot (works with most aircraft);
- Flight Performance Information (Speed, Distance, Time, etc.); and,
- And much more… .

The user interface for the Multi-function Display (MFD) is inspired by the Garmin® G3X Touch™ and, if needed, can be opened and closed by the user to conserve screen real-estate. The MFD function is independent of the ATC Controller functions and makes the experience much more realistic than in version 1.0.

This User Guide will attempt to cover all the features of P2A v.2.0 so you'll have a good reference manual when learning the program. For the most part, the program is intuitive enough you should not need to refer to this manual very much after a little time using the product.

NOTE: *Throughout this document, the term P2A will be used as an abbreviation for Pilot2ATC® .*

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Installation

Before using P2A, you'll need to download and install the free version of either XPUIPC (for X-Plane) or FSUIPC (for FSX or P3D). Follow the instructions that come with the downloaded files. If you have X-Plane and FSX or P3D, you can install both, as appropriate. P2A will then work with whichever simulator you bring up. XPUIPC Version 2.0.3.8 is also a good version.

XPUIPC Installation | X-Plane

XPUIPC is **not** part of P2A. Some may find the installation instructions hard to follow. Here are some tips on installing it:

1. Unzip the [XPUIPC and WPWideClient2.0.0.0.zip] files.
   NOTE: *The version number(s) may vary.*
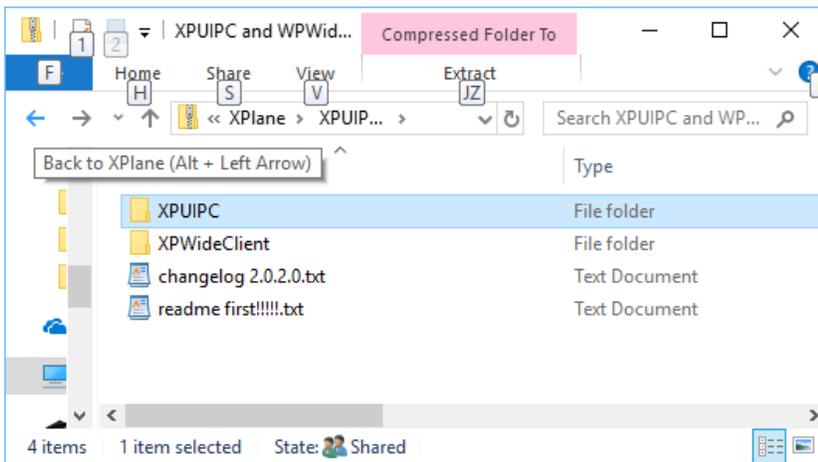
2. Copy the XPUIPC folder (Top folder above) to the X-Plane/Resources/plugins folder.
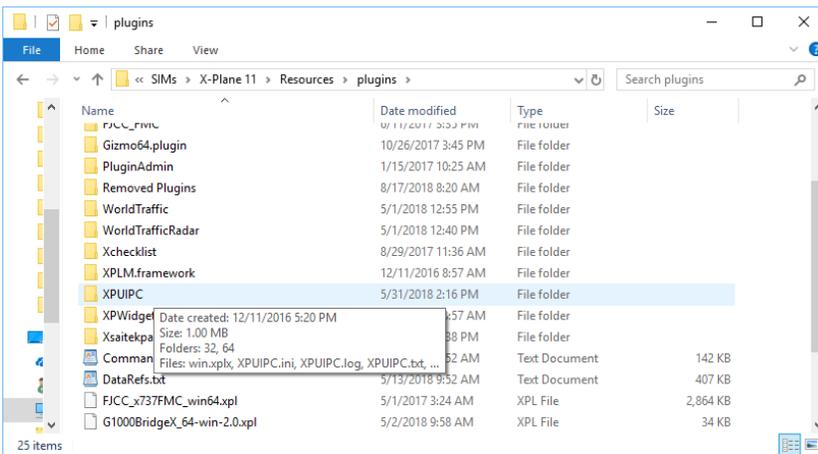
3. Done. Don't worry about the IP address. **Don't copy the XPWideClient folder anywhere.**
   COMMENT: *XPWideClient is a program used on a networked PC. It's not used at all when running P2A on the same machine as X-Plane.*

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If you want to avoid a message XPUIPC generates each time X-Plane starts, do the following:

1. Open the XPUIPC.ini file located in the XPUIPC folder you just copied
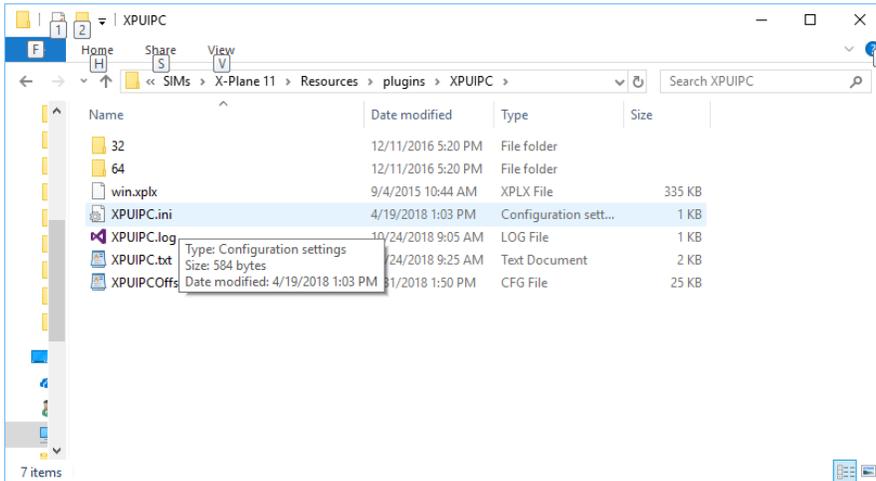
2. Replace the IP address on the "Server Address = 192.168.1.20" line with your computer's IP address or you can use the "local" address of 127.0.0.1.
   NOTE: *The "server" is the computer on which X-Plane is running.*
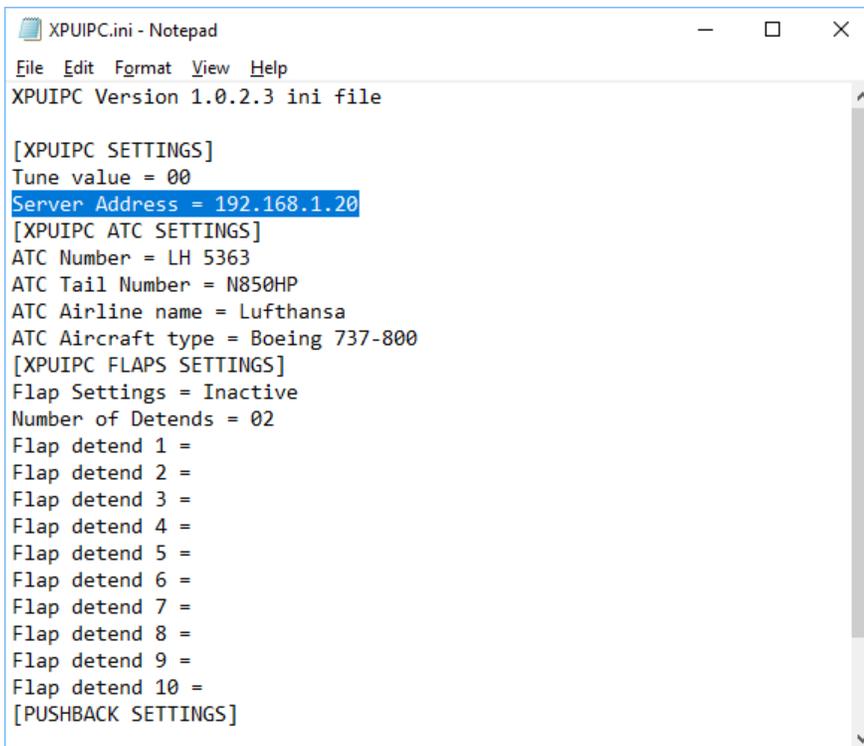
3. Done.

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## FSUIPC | *For FSX, MSFS and P3D*

This is the connector software for P3D and FSX. It can be downloaded here.

	Main products for FSX, FSX-SE, MSFS and all Prepar3D Versions releases to date
FSUIPC7 v7.3.12 **for MSFS [ONLY]** **[64-bit]**	Full release of **FSUIPC7** (incorporating the Server for **WideFS 7**), for use with **MSFS** Although **WideServer7** is built into FSUIPC7, you still need the **WideClient** from the WideFS link below. The WideServer component is enabled by a separate Registration code, which must be purchased from SimMarket (see below). Note: if you have purchased WideFS to work with FSUIPC4, FSUIPC5 or FSUIPC6, there is no need to re-purchase. Your existing registration details will still be applicable. October 20th 2022.
FSUIPC6 v6.1.9 **for Prepar3D Versions 4 & 5 [ONLY]** **[64-bit]**	Full release of **FSUIPC6** (incorporating the Server for **WideFS 7**), for use with **Prepar3D 64-bit Versions 4 and 5** Although **WideServer7** is built into FSUIPC6, you still need the **WideClient** from the WideFS link below. The WideServer component is enabled by a separate Registration code, which must be purchased from SimMarket (see below). Note: if you have purchased WideFS to work with FSUIPC4 or FSUIPC5, there is no need to re-purchase. Your existing registration details will still be applicable. May 13th 2022.
FSUIPC5 v5.157 **for Prepar3D Version 4 [ONLY]** **[64-bit]**	Full release of **FSUIPC5** (incorporating the Server for **WideFS 7**), for use with **Prepar3D 64-bit Version 4** Although **WideServer7** is built into FSUIPC5, you still need the **WideClient** from the WideFS link below. The WideServer component is enabled by a separate Registration code, which must be purchased from SimMarket (see below). If you have purchased WideFS to work with FSUIPC4 there is no need to re-purchase. Your existing registration details will still be applicable. Note: This product has now been superceeded by FSUIPC6 (above). It is recommended to use FSUIPC6 where possible, although please note that registration keys for FSUIPC5 are **NOT VALID** for FSUIPC6. June 28th 2020.
FSUIPC4 v4.977 [for FSX, FSX-SE and P3D 1.4-3.4] **[32-bit]**	Full release of **FSUIPC4** (incorporating the Server for **WideFS 7**), for use with **FSX, FSX-SE and Prepar3D 1.4-3.4** This version supports the FSX-SE Beta build 63003, but with restricted operation. Please see the IMPORTANT notes for FSX-SE users included in the ZIP. FSUIPC4 is not supported on any version of Windows before Windows 7, and will probably not work on such versions in any case. Although **WideServer7** is built into FSUIPC4, you will still need the **WideClient** from the link below. The WideServer component is enabled by a separate Registration code, which must be purchased from SimMarket (see below). **Please Note:** This version works with versions **1.4-3.4** of Prepar3D, but they will not be supported in the future. Prepar3D users should move on to Version 4. November 24th 2021.
WideFS7	Full package for WideFS7, which includes WideClient 7.160, WideCloser 1.0.2 and documentation. **WideClient** Links FS utilities over a LAN, without needing to have a copy of FS on the second computer. Note that **WideFS** consists of **WideClient**, **WideServer** and **WideCloser**. However, as **WideServer** is now included in FSUIPC since version **FSUIPC4**, it is

After downloading the appropriate version of FSUIPC, extract and follow the instructions.
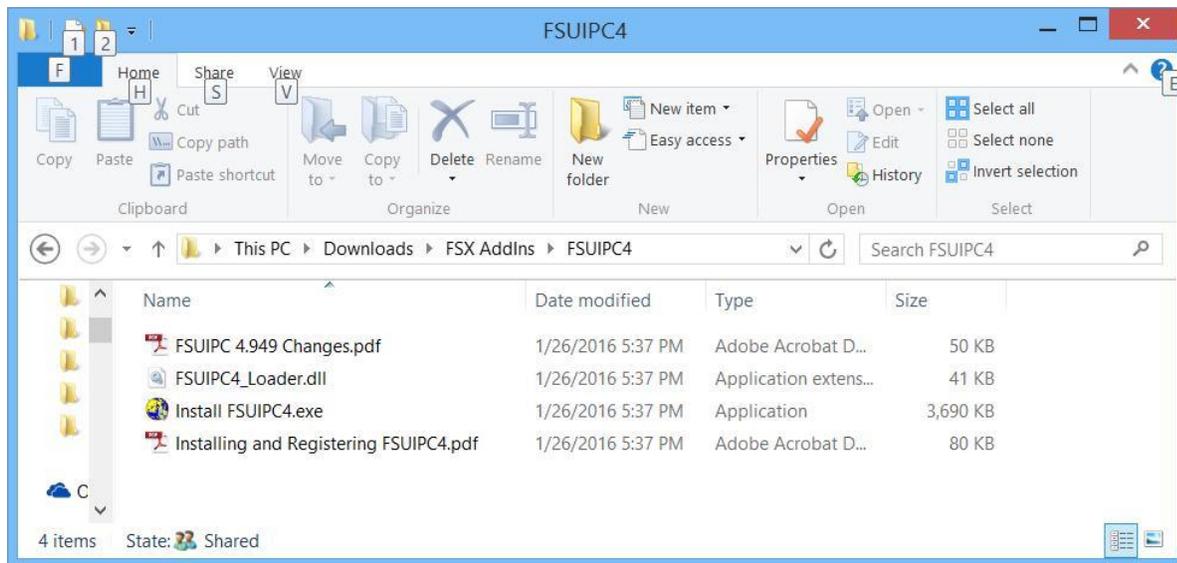
Click on the *Install FSUIPC4.exe* program and follow the prompts. The .exe program will look for FSX, MSFS and/or P3D on your system and take care of the installation for you. Note this caution statement, however, from the installation manual:

> ***Before trying to install FSUIPCx, you must have actually run FSX at least once. If you've not yet run FSX, do so first. This is necessary because certain essential files aren't created until you've run the program. The same applies to ESP and Prepar3D.***

Setting Up FSUIPC for MSFS 2020

The latest SIM from Microsoft requires some additional steps to get FSUIPC started.
- Download FSUIPC7.
- Unzip the FSUIPC7 file to a folder of your choice
- If you have customized files from release version of FSUIPC, you can copy the files like (FSUIPC.ini, .lua,.dll etc files to the new folder)
- The latest version of FSUIPC7 includes a launcher that will launch MSFS and FSUIPC in the correct order.
- Do not attempt to connect Pilot2ATC® until after you are in the cockpit in MSFS

Setting Up Adobe® Reader®

You'll also need to ensure Adobe Reader is installed on your computer and that it's the default program for .pdf files. This is necessary to display charts. **You can use FoxIt PDF Reader instead, if you have trouble with Adobe)** If you have Windows 8 or higher, the charts will open in the default Document Reader instead of in the P2A Charts window unless you install Adobe Reader for use on the desktop and make it the default for opening pdf files. **Regardless of the Windows version, you'll need to set the option inside the Adobe Reader Program to make it the Default program for opening .pdf files**.

To do this, select the Edit/Preferences menu item in Adobe. This box will appear.

Check the "Tell me if Adobe Reader is not my default PDF application" box and click the button above it marked "Select Default PDF Handler".

Click the *OK* button.

You'll then have to give permission for Adobe to make changes to your computer.
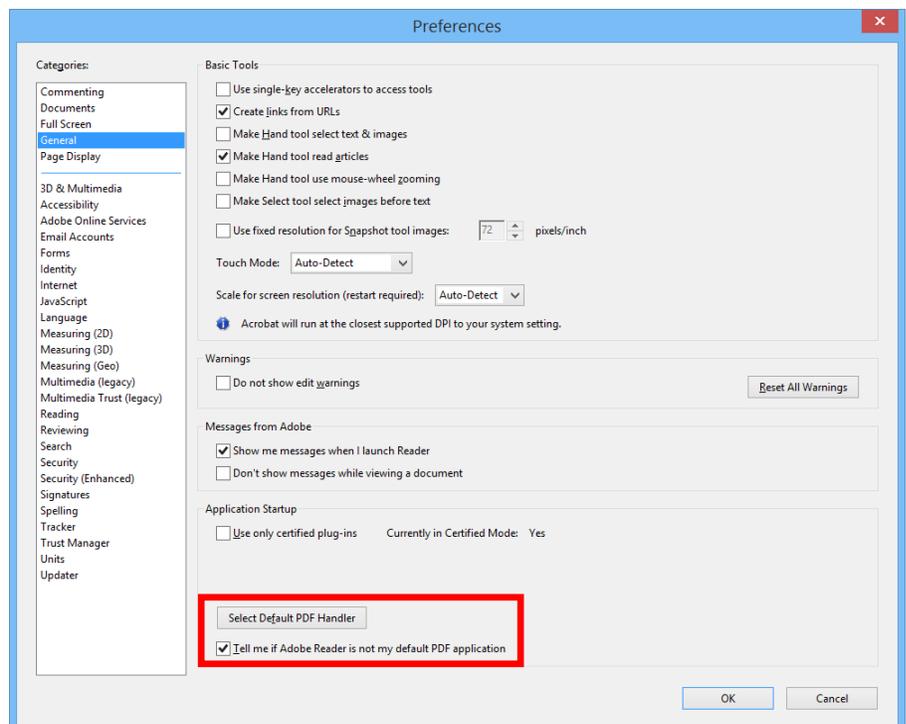
Installing P2A Software

Installing P2A is as simple as double-clicking on the setup file you downloaded with the trial or purchased version of the program. Prompts will guide you through the installation process, allowing you to install the program on virtually any local drive of your computer running the flight simulator. It's highly recommended you get P2A working on the same

computer running the flight simulator. It's possible to install P2A on a networked computer; however, some additional software and effort will be required.

COMMENT: *See the section on Networked Installation for details.*

Getting Microsoft SQLLocalDB to Work (Only do this if you get an error starting P2A)

In most cases, the Microsoft database engine will install without any problems as part of the Pilot2ATC installation. In some situations, when you start P2A the first time, it may "stall" at the 5% data loading level and then give an error message. If that occurs, try the following:

- Shut down Pilot2ATC
- Open a Windows command prompt.
- Type the following command: sqllocaldb stop MSSQLLocalDB
- Type the following command: sqllocaldb delete MSSQLLocalDB
- **REBOOT PC then execute these commands**
- Type the following command: sqllocaldb create MSSQLLocalDB
- Type the following command: sqllocaldb start MSSQLLocalDB
- **Reboot your PC**
- Try starting P2A again

If after restarting P2A you still stall at 5%, wait for the error message, make a screenshot of it and email to admin@p2atc so we can have a look and help you resolve the problem. Some Windows 11 upgrades from Windows 10 require some registry entries to be able to work.

Configure Joystick PTT Button

BEFORE TRYING TO USE P2A, YOU MUST CONFIGURE THE JOYSTICK BUTTON. SEE CONFIGURING P2A JOYSTICK BELOW. You may also want to complete other configuration steps before connecting and attempting to fly with P2A. **Also, when trying to speak on the radio, you should be sure you're connected to the simulator, your simulator radio is turned on and the volume is turned up in P2A. Master Battery and Avionics switches on.**

Language Setup

Because P2A uses Speech Recognition, how your PC Culture is configured can affect operations. Every attempt has been made to have P2A work in any environment, though not all environments have been tested. Following are a few pointers in the Language Setup Area. **For Windows 8 / 10, see the Windows 8/10 Language Settings in this document.**

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Language Packs

Windows can be tailored to many cultures and languages. If you have Windows 7, be aware that only Windows 7 Ultimate or Enterprise can install additional Language Packs. **You MUST have the US English Language Pack installed on your computer and it must be set as the default language. See the Windows 7 Language Settings.** You should give it a try and see if it works for your specific environment. If not, contact support at admin@P2ATC.com and we'll do all we can to help you with the settings. In Windows 10, you install languages in the Settings. No need to download anything.

Numeric Settings

Tuning radio frequencies is crucial to the correct operation of P2A. Some cultures use a period (".") for thousands separators while others use a comma (",") for decimal separators. P2A sets culture settings for the application to avoid this problem, but it can still occur in some Windows environments. This must be reversed in order for P2A to operate properly. If not, your radio frequencies will appear as illustrated in the screenshot.

If this occurs, open the Windows Control Panel and select Language. There, you'll be able to change number formats. In Windows 8, the Language Control Panel looks like the screenshot below.
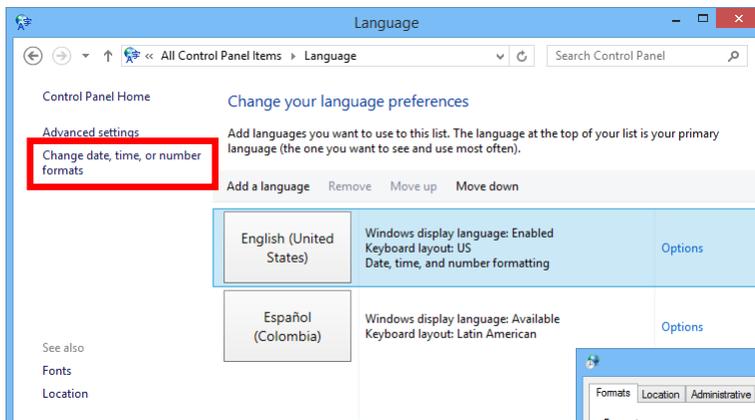
To change the number format, click on the link on the left side of the screen. That will open the Region settings screen.

Clicking the *Additional Settings* button will open the Customize Format screen where you can change the number formatting.

Set the Decimal symbol to period (".").

Set the Digit grouping symbol to comma (",").
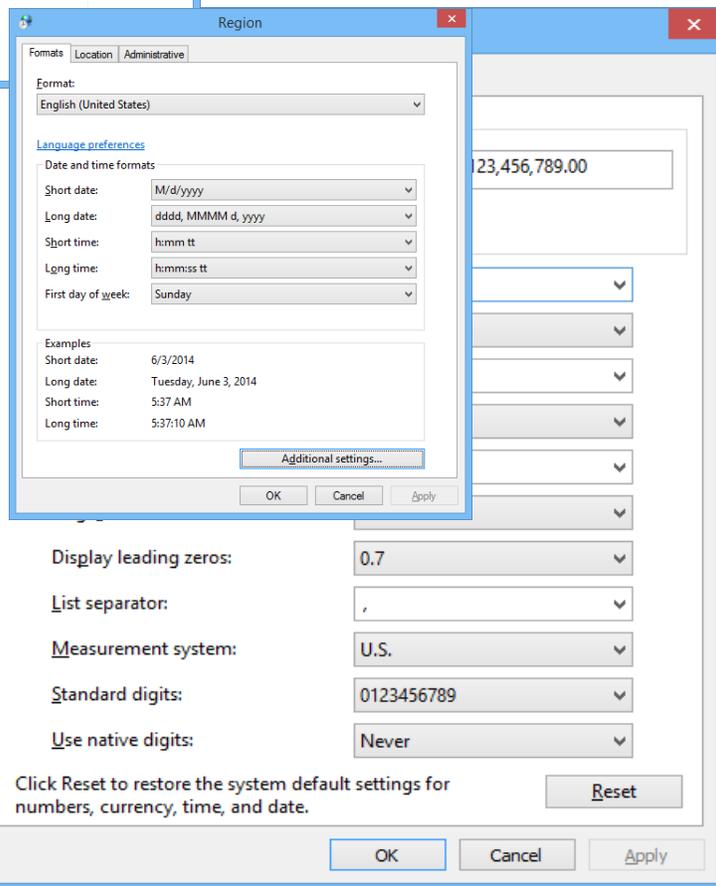
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Program Startup

After you go through the Install process, navigate to the directory where you installed the program and click on *P2A_200.exe*.

NOTE 1: *For easy access in the future, right-click P2A_200.exe to create a desktop shortcut or pin it to your Task Bar or Start Menu.*

NOTE 2: *Some PC setups require you to run P2A as Administrator to allow security access to some PC resources or to have access to the internet for retrieving weather or maps. If so, right-click the program in Windows Explorer and select "Run as Administrator".*

When you start P2A for the first time, you should see a dialog box with three [3] buttons:

Exit Application – Click this button to exit the program without proceeding any further.

Register – Click this button if you've purchased the product and are ready to register it. The license key is sent via email. Be sure to save it in a secure place.

Start Trial – Click this one to begin the free, 10-day trial. You will need to enter your email address as a form of identification.
.
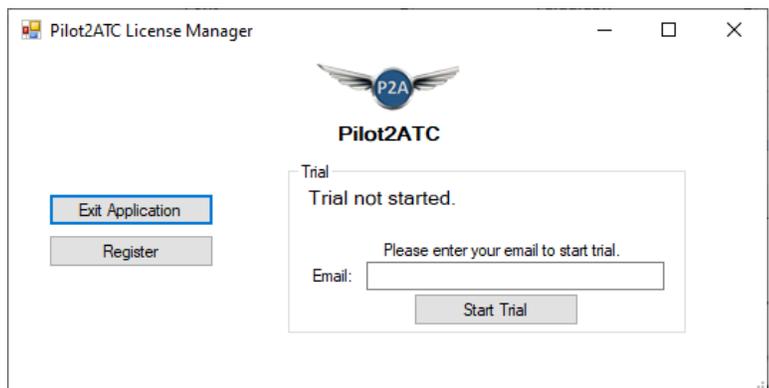
NOTE: *Our support team may need this to help you if you have registration problems.*

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Start the Trial

Once you click the *Start Trial* button, your trial will be activated, and your 10-day trial period will begin. Future startups won't give you that option. Instead, the days remaining in your trial will be shown at the top of the dialog. To continue the trial, just click "Continue to Trial" and you'll be taken to the main P2A screen.

Each time P2A is started during the 10-day trial period, you'll see this screen. Click "Continue to Trial" to access the program.
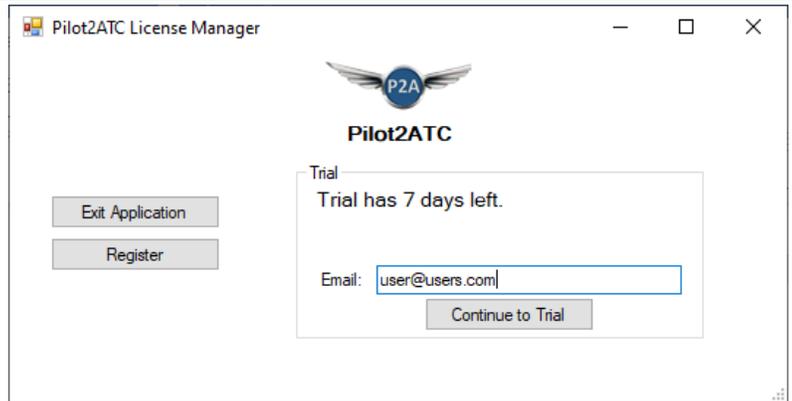
After clicking "*Continue To Trial*" or "*Register and Continue*", you'll see this screen. It'll be displayed while the database is loading. Be patient – this process can take 1-2 minutes.
**NOTE:** *You can monitor the progress of the loading sequence by watching the "% Done" number.*

When done, P2A's main screen – as seen below – will be displayed.
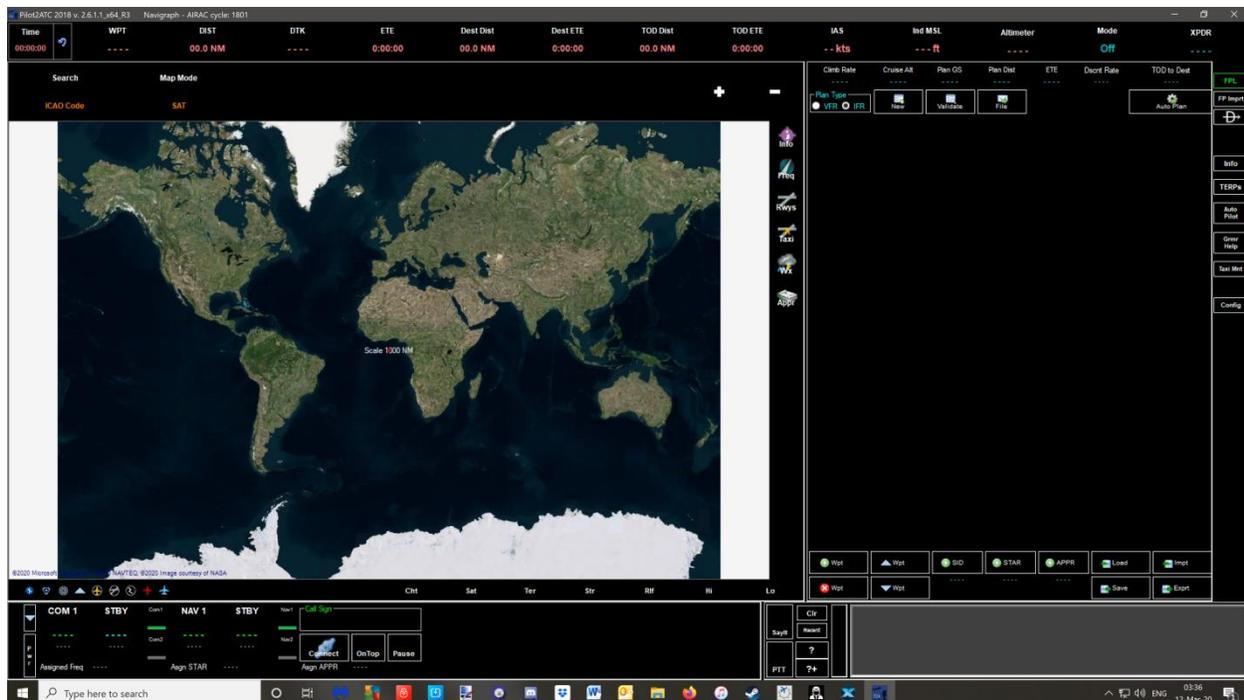
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The End Of The 10-Day Trial Period

When the 10-day Trial is over, you'll see the box to the left after opening P2A. After purchasing a license, you will receive a license key via Email. Press the Register button and you will see the Activation area. Copy the license key from the email you received, place your cursor in the License Key box and click the *Activate* button.

IMPORTANT:
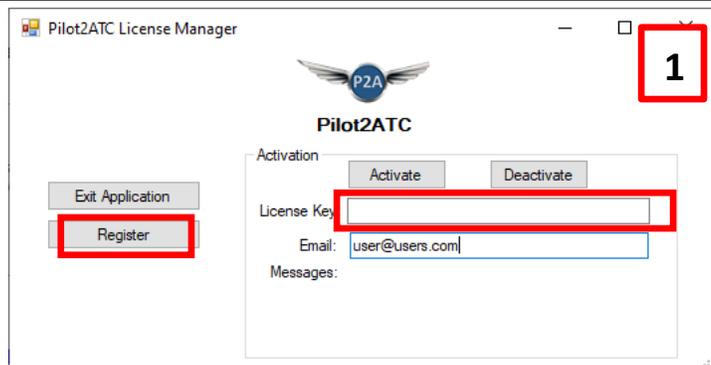
After clicking the *Activate* button, the appearance of the box to the right will [1], indicate the license key has been accepted, and [2], signal the fact the program has been registered.

This screen will also display the progress being made in loading the database. Be patient, this can take 1-2 minutes. **NOTE:** *You can monitor the progress of loading by watching the "% Done" number.*

When done, the main screen illustrated on the previous page will be displayed.

Purchase and Register Your Copy

We strongly recommend you use the generous 10-day trial period to get P2A up and running before you purchase a license. That way, any unforeseen issues can be resolved and you'll know, with great certainty, it'll run in your environment.

Once you're ready, a full license may be purchased from the P2A website. After doing so, you'll receive an email containing your full license key. Be sure to save it in a secure place. The next time you start P2A, click the Register Button and enter your license key in the box provided [as shown in Box #1 above].
HELPFUL TIP: *You can copy the key from the email and paste it in the first box to avoid having to type it in.*

After registering, you won't see the licensing box above again. Instead, you'll be taken directly to the Loading Data screen after starting the program [as shown in Box #2 above].

DEVELOPER NOTE 1: *In general, you should not uninstall P2A – it will make the licensing software think you are trying to install a second copy when you try to register again. If you want to "refresh" your installation, just install the program to the same directory and it will replace all the files.*
DEVELOPER NOTE 2: *Changes to your PC configuration will make the license software think you're trying to run the program on a different PC. If it won't let you register – and displays a message about being installed on another machine, just press the Deactivate button, wait for that to succeed, then press the Activate button. Be sure you are running the latest version of Pilot2ATC for this to work.*

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Interaction with X-Plane, P3D and FSX

The action/reaction between the SIM window and P2A depends on which SIM you use. Here are some basic guidelines:

1. Running any of the SIMs in Full Screen mode renders P2A's OnTop feature unusable because Windows doesn't control the screen hardware – the SIM does. To share the screen with P2A, a SIMs must be in Windowed mode.
2. When P3D or FSX lose focus – like when you click anywhere outside of their window – they pause. That behavior can be changed using a setting in FSX or P3D.
3. When P3D or FSX lose focus, the SIM's sound – like engine noise – is lost, and it only comes back when the SIM's focus returns. This behavior can be change by a setting in P3D only.
4. X-Plane does not pause or go silent when it loses focus.

Uninstalling

It's very rare uninstalling P2A helps resolve an operational problem. In most cases, uninstalling it will mess up the licensing software and you'll need to request a license reset as describe above to be able to register the product again. You should be able to simply install the update or the full product over what you have and get the same results without the hassle.

COMMENT: *The difference between the full product and the update is this: the full product includes the databases while the update does not.*

If you want to reset all Config settings to the initial settings, delete the AppConfig.xml file in the Settings folder:

Drive Name:\users\<UserName>\AppData\Roaming\P2A_200\Settings\ AppConfig.xml

NOTE 1: *Drive name is typically C:, though it may be something else depending on where in your system you installed the program.*
NOTE 2: *<UserName> is your PC user name.*

If you really want to uninstall P2A, then there's a program in the install folder named uninst000.exe. Double-click it and it should do the job. You may, however, have to manually delete the Settings folder located at:

Drive Name:\users\<UserName>\AppData\Roaming\P2A_200\Settings

NOTE 1: *Drive name is typically C:, though it may be something else depending on where in your system you installed the program.*
NOTE 2: *<UserName> is your PC user name.*

Networked Installation

P2A can be installed on a client computer separate from the main Flight SIM computer. For the purposes of this discussion, the computer with the Flight SIM installation will be called the Host and the one with P2A the Client.

For any networked installation, the WideClient or XPWideClient will be used to connect the Host and Client PCs.
NOTE*: See the FSUPIC or XPUIPC installation instructions for information on installing these programs.*

For the "bare bones" simple network installation, do the following:

1. Install P2A on the client PC along with WideClient (Paid License of FSUIPC required) or XPWideClient (included free with XPUIPC);
2. Connect headphone/mic to the Client PC;
3. Set the Host PC Sound Output to the Speakers to hear the Flight SIM's sounds;
4. Set up a HotKey on the Client keyboard to activate the PTT button – or – use the on-screen PTT button in P2A; and ,
5. Start: the SIM | the WideClient or XPWideClient program | P2A.

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While this works, it leaves a lot to be desired. There are untold numbers of different ways a network environment can be setup. Here, though, is one way to set it up for P3D/FSX and another for X-Plane.

P3D/FSX Networked Installation

**NOTE:** *This description was provided by Bill Clark, a P2A user and member of the Beta Testing team.*

If you're running P2A on a network PC and would like to either send either a button Click on your joystick or a character from your joystick from the Flight Simulator PC using a built-in feature of FSUIPC4 and WideFS to P2A or any other app running on a Client PC, here is how to do it:

P2A will run on a network PC (Client) and only requires WideFS to communicate to the Microsoft based (Server) simulator such as FSX, FSX STEAM, and P3D. The first step, using one of two methods noted below, is to assign a Joystick Button or a KeyClick to FSUIPC4.

Method #1 – Assigning a Joystick Button

1. Open FSUIPC4. Select "Buttons and Switches" tab.
2. If you want to assign this button Click to a "profile," check "Profile Specific" box.
3. Click the button on the Joystick you want to use for PTT (you should see entries made in Joy# box).
4. Check "Select for FS control" box.
5. In the "Control sent when button clicked" pull-down menu, search/find and select "KEYSEND 1-255 (WideFS)". In the "Parameter" box below, enter "1".
6. In the "Control sent when button released" pull down menu, search/find and select "KEYSEND 1-255 (WideFS)". In the "Parameter" box below, enter "2".
7. Click the "OK" button and return to the SIM.

Your selections may look similar to what you see in the illustration below:
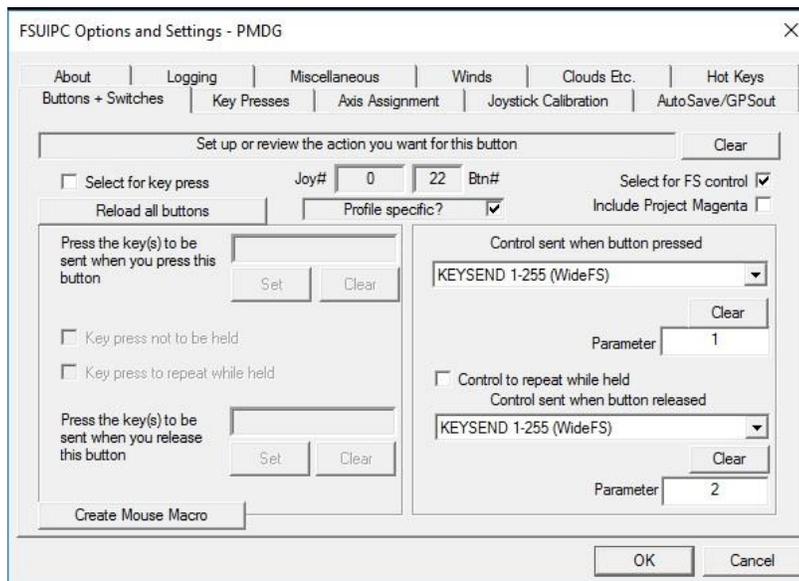
In the FSUIPC.ini file, there should be an entry looking similar to this (this profile is for PMDG):

```
[Profile.PMDG]
1=Boeing 737-7H4NGX Southwest Airlines Winglets
2=Boeing 737-832NGX Delta Air Lines Winglets
3=Boeing 737-8H4NGX Southwest Airlines (Warrior One) Winglets
[Buttons.PMDG]
0=P0,22,C1006,1 -{KEYSEND 1 for WideFS}-
1=U0,22,C1006,2 -{KEYSEND 2 for WideFS}-
```

Method #2 – Assigning a Joystick Key Click Character

1. In the event you have a programmable "smart" joystick, you may have assigned a specific key Click character to a joystick button.
   COMMENT: *In the example below, the character assigned is a "comma."*
2. If you want to assign this key click to a "profile," check "Profile Specific" box.
3. Under the "Program keyboard controls here", click the "Set" button.
4. Click the button on the joystick to send the character you want to use for PTT (you should see and entry that looks like this ",<key").
   IMPORTANT: *The comma character chosen is not used in or by the simulator, nor is it used as the character that'll be assigned to P2A.*
   NOTE: *The "actual" character will not to be sent to P2A. It'll be assigned when WideFS.ini file is setup.*
5. In the "Control sent when keys Clicked" pull down menu, search/find and select "KEYSEND 1-255 (WideFS)". In the "Parameter" box below, enter "1".
6. In the "Control sent when keys released" pull-down menu, search/find and select "KEYSEND 1-255 (WideFS)". In the "Parameter" box below, enter "2"
7. Click the "Confirm" button.
8. Click "OK" to return to the SIM.

Your selections may look similar to what you see in the illustration below, although the entries on the right side may not appear until later:
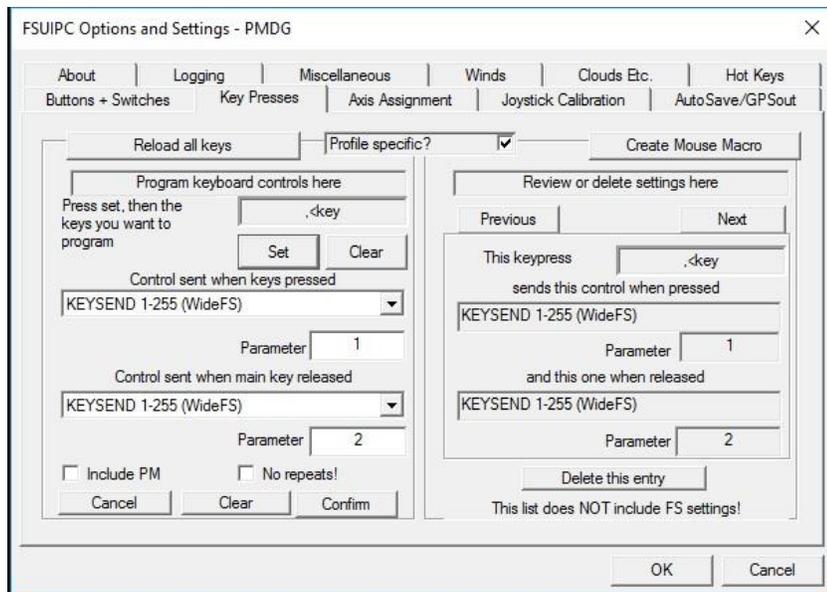
In the FSUIPC.ini file, there should be an entry that looks similar to this:
NOTE: *This profile is for PMDG*.

```
[Profile.PMDG]
1=Boeing 737-7H4NGX Southwest Airlines Winglets
2=Boeing 737-832NGX Delta Air Lines Winglets
3=Boeing 737-8H4NGX Southwest Airlines (Warrior One) Winglets
[Keys.PMDG]
4=188,8,1006,1,1006,2 -{,<key: Click=KEYSEND 1 for WideFS, Release=KEYSEND 2 for WideFS }-
```

For Either Method #1 or #2 – Client PC WideFS Setup

Each of the methods outlined above sets up an FSUIPC KeySend1 and KeySend2 command. Now, we must tell WideFS what to do when it receives each of these Key commands.

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On the client PC where P2A resides, enter the following into the WideFS.ini file if you wish to assign F12 to PTT. Save the file.

```
[User]
KeySend1=123,16 ; Click F12
KeySend2=123,24 ; Release F12
UseSendInput=Yes
```

In the example above, you're telling WideFS there's a keyClick command sent to [1], hold down a specific key, and [2], release it.

The number "123" is the WideFS definition for F12. Refer to the **WideFS Technical Document** pages 18 through 20 for more information about the other settings. If you wish to use a different character to send to P2A for PTT, refer to page 20 in the WideFS documentation.

Finally, in P2A, assign the PTT HotKey to F12.

X-Plane Networked Installation

If you're just looking to have the button presses on a different machine, then there is a community tool that might do the trick:
https://forums.x-plane.org/index.php?/files/file/54843-pilot2atc-ptt-network-kit/

The above freeware may be all you need, or for a full setup, you may need some or all of the following.
This approach will use two [2] pay-ware programs – *SPAD-Next* and *Multiciplicity*.

SPAD-Next allows you to assign a button on the SIM machine to fire a KeyClick event. There are other ways to accomplish this; however, *SPAD-Next* was used to [1], manage profiles for different aircraft, and [2], do a host of other things. That's why it was employed for this task.

Multiciplicity is the key "magic" maker. It allows a single keyboard and mouse to be shared by two [2] or more computers. Those computers are also allowed to share audio output, over a LAN, either in a wireless or physical manner.

Here's a high-level, step-by-step process to get you going:
1. Install *SPAD-Next* on the Host computer according to instructions.
2. Use *SPAD-Next* to set a button on your yoke or joystick to be used as the PTT to fire a keystroke. Use any key not already in use for another purpose.
3. Install *Multiciplicity* on both the Host and the Client according to the *Multiciplicity* instructions. You'll know it's installed properly when your mouse can move between the 2 computers as if they were just 2 screens on a single PC.
4. Set *Multiciplicity* Audio settings to push the audio from the Host X-Plane computer to the Client P2A PC.
5. Plug your headset into the P2A PC and get the Microphone and Headphones set up to work with P2A as described in the single PC installation instructions.
6. Set the PTT HotKey in P2A to the keystroke you fired in *SPAD-Next* with the button Click.
7. Start X-Plane, SPAD_Next, *Multiciplicity*, XPWideClient and P2A.
8. Be sure the mouse is visible on the Client (P2A) computer. Click the PTT Button on the Host. The PTT onscreen button in P2A should turn green. If so, you're ready to fly.
   NOTE: You can "triple click" the control key (see below) to make the keyboard hot in both PCs at the same time so your mouse can be anywhere and the PTT button still work. The only caution with this is to be sure you don't have a lot of HotKeys set up in X-Plane.

From *Multiciplicity* User's Guide:
- **Clicking the Ctrl key three [3] times will toggle keyboard input being sent to all computers.**

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- Clicking the Ctrl key (left one) three [3] times on the Primary will send any subsequent keyboard input to all Secondary *Multiciplicity* computers simultaneously.
- Clicking Ctrl key (left one) again three [3] times stops the keyboard broadcasting. An audible 'beep' will sound when turned on and off.

User Guide

SPAD-Next Setup
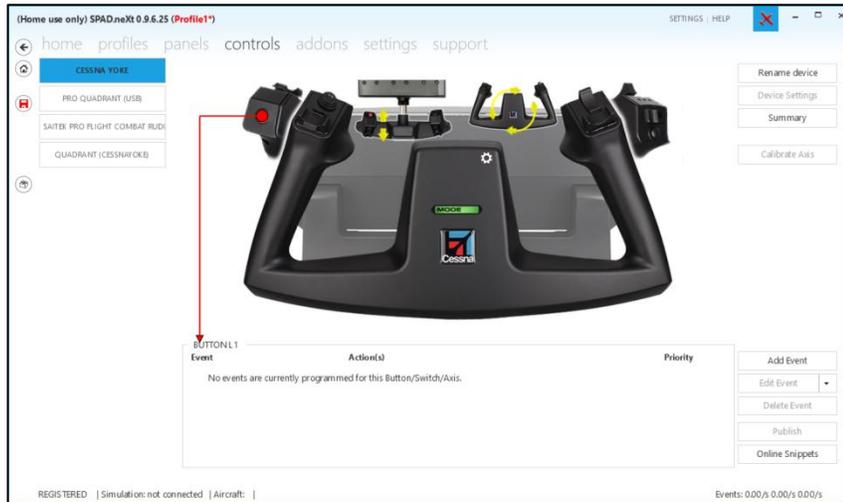
In *SPAD-Next*, the button you want for the *PTT* button to Click and Release a Key on the Keyboard must be set. To do that, open *SPAD-Next*. Find the joystick or control on which is your desired button is located. Click that button.

Click the *Add Event* button.
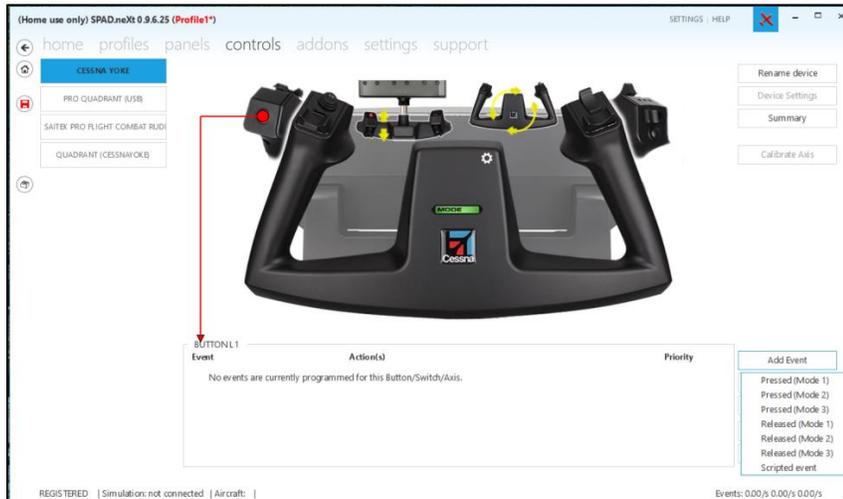
Select the button action you want for PTT. In this case, we'll choose Clicked (Mode 1) and then come back and choose Released (Mode 1). This has to do with the action on the control.

On the resulting dialog, select Keyboard in the "Actions" area.
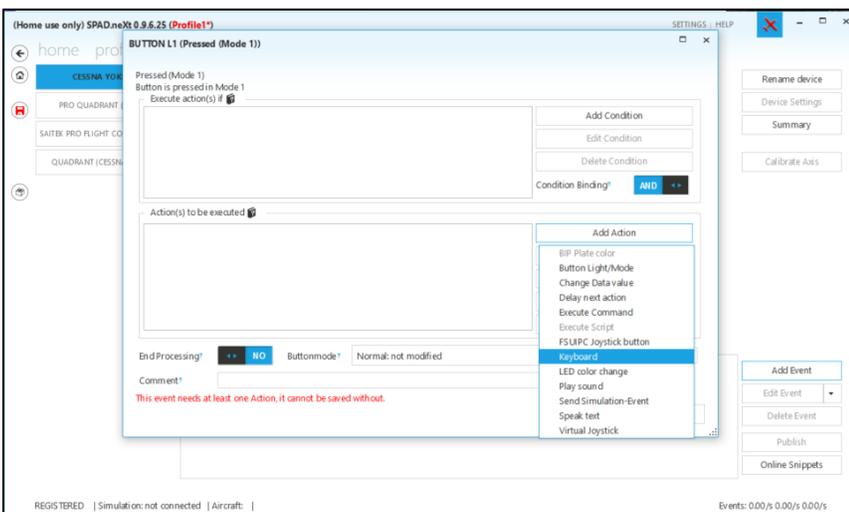
User Guide

In the next dialog box, if necessary, click the Clear button. It may not be Red when you first open the dialog. Also check the "Press Key" option in the top area of the dialog.

Click Assign and it will turn Red. Click the Desired Key ("*" in this case) and click OK. Do not touch other keys or you'll add them to the key sequence (that happened below when trying to use Print Screen to capture the image).
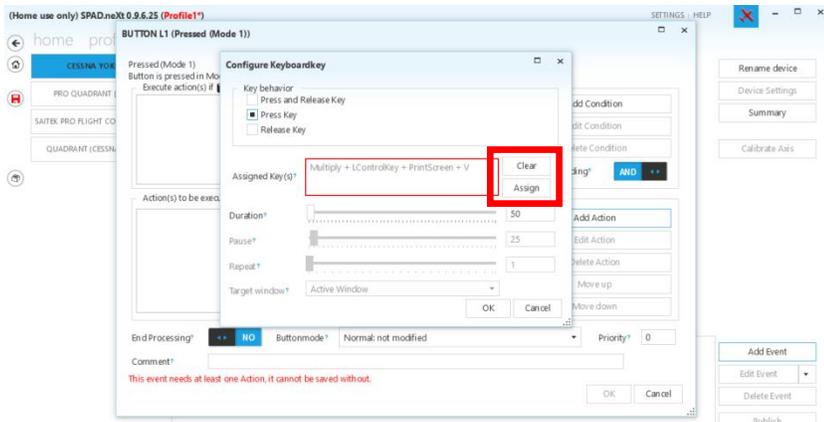
Repeat the Process for the Release Action. Be sure to check the "Release Key" option.
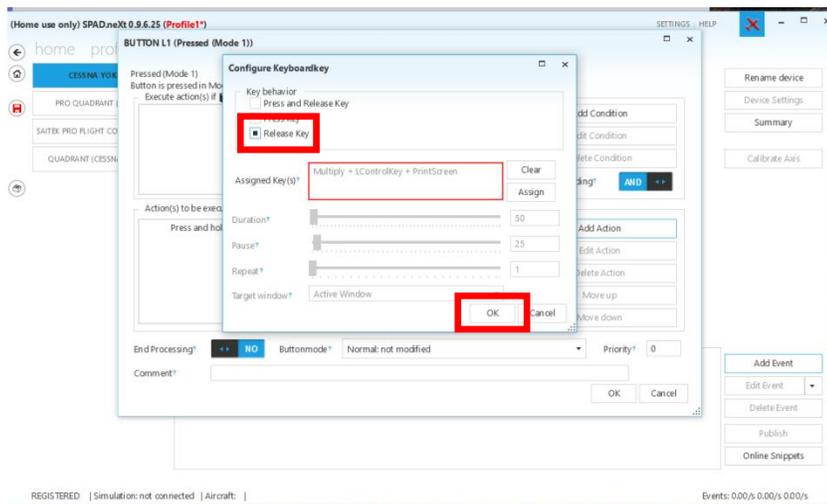
Click OK two [2] times and you'll be back to the main Control screen with the action added. Be sure to save your assignment.
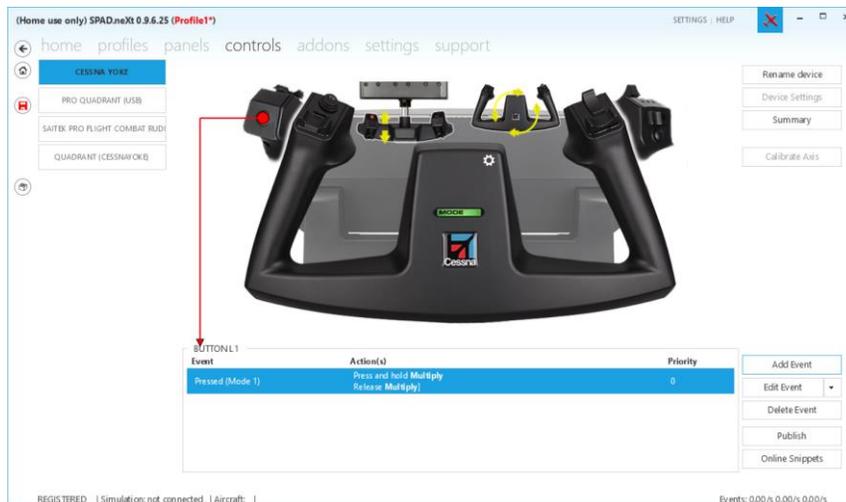
User Guide

Trouble Shooting

Connection Issues

When P2A connects, there should be three [3] lines in the Speech Text Window at the bottom right and the *Connect* button should turn green. If not, then you're not completely connected. Check the following:

1. XPUIPC installed in X-Plane Plugins folder or FSUIPC installed in FSX/P3D.
2. Make sure you are running the latest version of P2A.
3. English-US Language installed and set as Primary Language.
4. Working Microphone installed and set as Default Sound Input device in Windows.
5. Valid Call Sign – Try using the default call sign of Mfg: Beech; Tail Number: N431VB. Click the Save button.
6. Try running the program in Administrator mode by right-clicking on the P2A.exe file and selecting "Run as Administrator".
7. If connected, but the radios aren't working, check the Battery and Avionics switches on or the "Ignore battery" and "Ignore Avionics" options are checked in P2A Config.
8. If it seems to partially connect, but the Connect button does not turn green, set the Weather option to a different source such as NOAA Real Time Weather and try again.

No Response From ATC

If you're connecting, but not able to get a response from ATC, then there are some other things you can try.

1. **SWITCH SETTINGS** – Check to be sure the Power indicator in the bottom left of the P2A's main screen is green. If not, then you need to turn on the battery switch and avionics switch in the aircraft. If that doesn't turn it green, check the two [2] options "Ignore Battery Switch" and "Ignore Avionics Switch" in the Config P2A Setup panel.
2. *VALID CALL SIGN* – Make sure you're using a valid call sign by changing it to the default Mfg: Beech; Tail Number: N431VB and clicking the Save button.
   NOTE: *Send me a screenshot of this page (admin@P2ATC.com) and I'll let you know if there's a problem with the call sign.*
3. **VALID FREQUENCY** – Be sure you have a valid frequency showing in the Active frequency display. Open the Radio Panel and check that the frequency selected has a valid Controller assigned. Try swapping the active and standby frequencies a couple of times.
4. **PTT BUTTON** – Use the PTT button on the main screen to eliminate the possibility of it being the Joystick button setup as the issue.
5. **VALID PHRASES** – Make sure the phrase you're using is appropriate for the Controller. "Say Altimeter" should work with all Controllers, so use it.
6. **VOLUME SETTINGS** – Check the Windows Volume Mixer and be sure P2A's volume is turned up (Right click on the speaker icon in the task bar and select Volume Mixer). Check the volume of the voices in P2A Config. On the Communications tab of the Sound dialog, be sure "Do Nothing" is checked for when Windows detects Communications activity.
7. **GRAMMAR HELP SCREEN AND DIAGNOSTICS** – Try using the Grammar Help screen.
   a. Click the Grmr Help button to the right of the Flight Plan.
   b. Press the Practice button.
   c. Take a screenshot of the resulting Message box with the connection information. Email it to me (admin@P2ATC.com).
   d. Try saying "Say Altimeter" with no other words. It should be recognized. Let me know the result.
8. **Interference from Sound Software-** Many PCs come pre-loaded with sound editing and other sound software. Some of these interfere with P2A getting access to the microphone. ASUS Sonic Studio and ASUS Sonic Radar are examples of this sort of software that cause issues. Try uninstalling this software.

User Guide

Grammar Help Replay Not Audible

If you're not being recognized in the Grammar Help Practice sessions, click the "Replay" button and see what you hear. That's what P2A is hearing.

If you're not hearing anything with the Replay, P2A isn't hearing the input – and that explains the speech recognition problem.

1. Be sure your microphone is not muted on the device itself.
2. Recheck that the microphone is set as the Default recording device in Windows.
3. In the Microphones Properties:
   a. Check the volume level of the Microphone.
   b. On the Advanced tab, be sure the Exclusive Mode option is unchecked.
   c. In the Sounds Communications tab, check that the "Do Nothing" option is checked.
4. There've been a few users with USB headsets that worked on USB 2 ports and didn't work on USB 3 ports. If you have a USB headset, try changing ports.

Speech Recognition Settings

1. Open the Control Panel – not the Settings tab.
   NOTE: *Open the Start menu and type Control Panel to do this.*
2. Select Speech Recognition. Select Advanced Speech Settings.
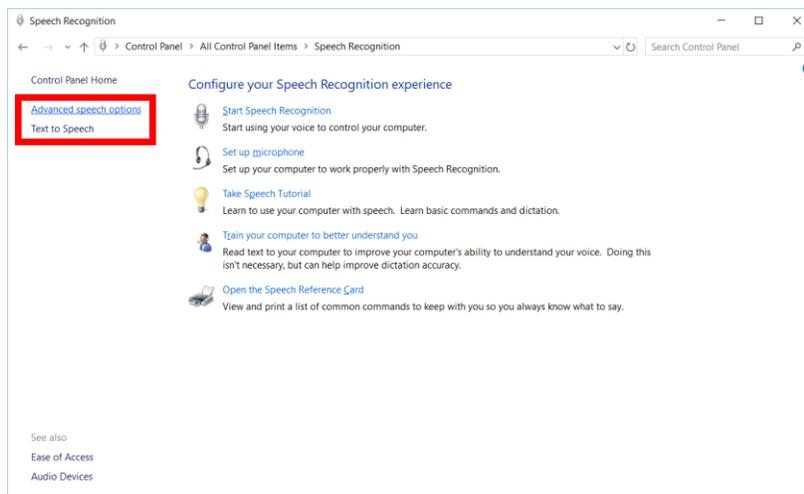
3. The window below will open:
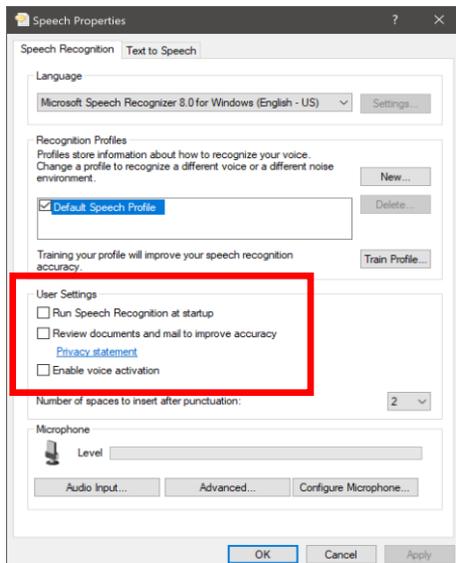
4. Be sure *Microsoft Speech Recognizer 8.0 for Windows (English-US)* is selected for Language.
5. All User Settings should all be **UNCHECKED.**
6. Speak into the microphone and be sure the Level box shows it is picking you up.
7. Open the Advanced dialog by Clicking the Advanced.. button
8. Be sure the Use Preferred audio input device is checked
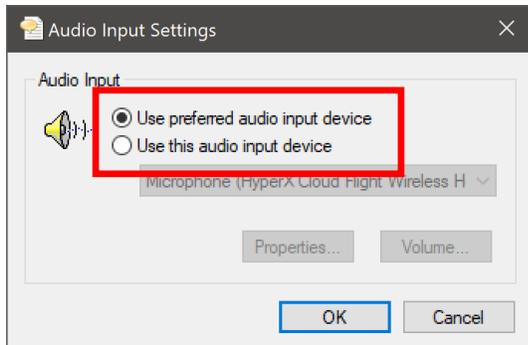
Additional Speech Recognition Troubleshooting

P2A and Radio Settings

By far, the most common reasons for issues surrounding voice recognition are problems with the P2A Connection and Radio Settings. If P2A isn't recognizing anything you say, try the following:

1. **Click the Tst Button on the Voices tab of the Config window.** This ensures you're connected to the SIM and on a valid Radio Channel with the Radio turned on. You should hear a Controller say **"This is a test of the radio system. You are tuned to xxxx xxxx on nnn.n"**, where xxxx xxxx is the name of the Controller and nnn.n is the frequency. This will also be displayed in the speech text box in white letters.
   NOTE: *If this worked, continue with Microphone Trouble Shooting below.*

2. **If the Tst button did not work, check the following**:
   a. **You are connected to the Sim.** The Connect button should be green and say Connected instead of Connect. Your call sign / tail number will be shown in green in the Call Sign Text box.
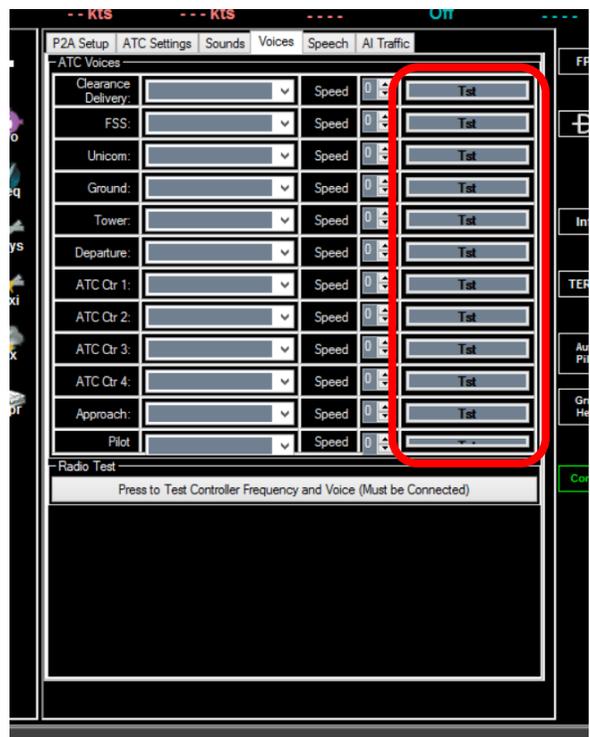
   b. **Your Radio is Set to a Valid Frequency.** In this screenshot, the Radio is on Com1 and tuned to Oakland Clr Del. You can have a frequency dialed in that's valid, but too far away, and you won't be able to communicate with it.

When you first connect, the Radio may display incorrectly. Try swapping the standby and active frequencies two [2] times to be sure it's tuned to the displayed frequency.

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c. **If the Tst button still doesn't work.**
If you try the test button again and it doesn't work, you have a connection bug of some sort.

If the Test Button worked, you may have a Microphone Problem.

Microphone Trouble Shooting

There are several possibilities when dealing with a PC Microphone issue.

1. **Your Mic is not set up in Windows as the Default Input Device**.
The best way to check for this is in the Control Panel's Sound section. Check the Recording Tab to see if the microphone you're using says "Default Device" or something similar under its name.
DEVELOPER COMMENT: *On my PC, I show 3 active Recording Devices with my Headset Microphone as the Default Device and the other 2 say Ready.*

   If your Mic doesn't say Default Device, select your Mic. Click the *Set Default* button (red box). If *Set Default* is grayed out when your Mic is selected, it means your Mic is already set as the Default.
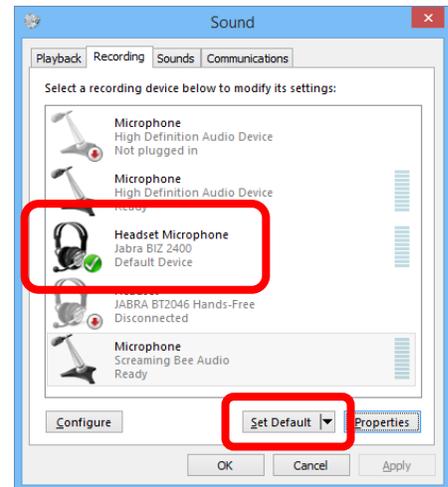
2. **Your Mic is not Working or is Set Too Low.**
Check the Properties of your Mic in Windows by selecting it in the Sound Dialog and Clicking the *Properties* Button.

   a. **On the Listen tab**, check the "Listen to this device" checkbox and then click Apply. Speak into the Mic. If you can hear yourself clearly, all is okay with the Mic Volume, etc.
   b. If you did **not** hear yourself – or if it was very weak – go to the **Levels** tab and check that the volume is set high enough. If necessary, increase it until you **can** hear yourself clearly. If you can't hear yourself clearly at 100%, your Mic obviously isn't getting a signal to your PC.
   c. If your voice sounds distorted, you may need to turn this level down. P2A can't understand a distorted voice any better than a weak one. Don't yell into the microphone!
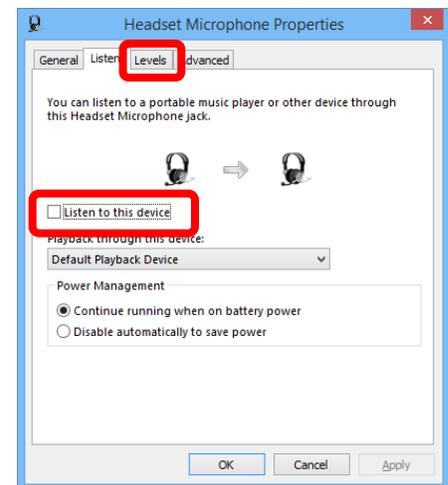
3. **Your Mic has a Volume Control or Mute Switch.**
Some microphones have a volume control on them, *especially* when associated with a headset. If that microphone volume is turned down, the PC won't hear it and P2A won't be able to hear you. Be sure it's turned up. Also check the Mute button/switch to make sure it's not muting the physical microphone.
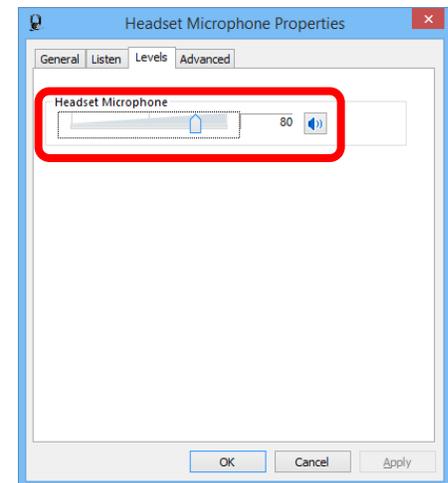
Voice Recognition

If the Radio and Microphone are proven to be working in the steps above, it could be that P2A is not recognizing your speech. The speech recognizer is listening for specific phrases in its Grammar. The simplest phrase that it should recognize is "Say Altimeter".
Remember to hold the PTT button momentarily before saying the phrase, then hold it momentarily after the phrase. It takes a brief time for the Windows speech engine to transfer your speech to the program.

User Guide

To check Speech Recognition do the following:

1. **Click the Tst button** to be sure all is connected and working well. See procedure above, if needed.
2. **Hold down the PTT button.** This eliminates the possibility your joystick or hot key isn't set up correctly.
3. **Speak the phrase "Say Altimeter".** This is the simplest phrase all Controllers should recognize. Try it several times if needed – and say it slightly differently each time. A normal spoken voice usually works.

Windows Speech Recognizer Language and Windows Language Settings

In some cases, users have had issues with their default language settings being set for the UK rather than the US. To check your Windows 7 Language and Speech Recognition Settings, do the following:

Windows Speech Recognizer Language

To Check the Speech Recognition Language:

- From the Control Panel, select Speech Recognition.
- In the upper left of the resulting screen, select Advanced Speech Options.
- In the resulting dialog box, check that the language in the drop-down is *English (United States).*
- Click OK – and test to see if your voice is recognized.
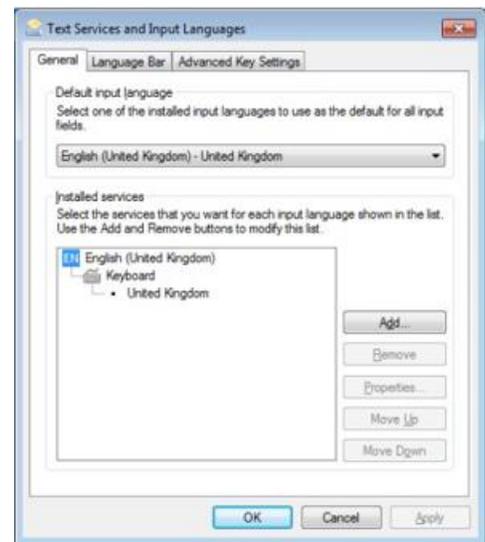
Chart Display Issues

If charts aren't displaying inside the TERPs window, it's likely because Adobe Reader is either not installed or has not been set up as the default .pdf document reader. **This must be done inside the Adobe Reader program; Adobe Reader must also be set as the default program for .pdf files in Windows. In Adobe Reader, go to Edit > Preferences.**

Program Disappears When Open

There've been several users having the program open and not be visible except on the task bar. This is a Windows issue. Here're a number of fixes to try:

1. Start P2A.
2. Check that it's active on the Task Bar (indicating it started).
3. Right click on the Task Bar.
4. Select "Show Windows Stacked".
5. Find P2A and resize it and move it where you want it.

It should then be okay.
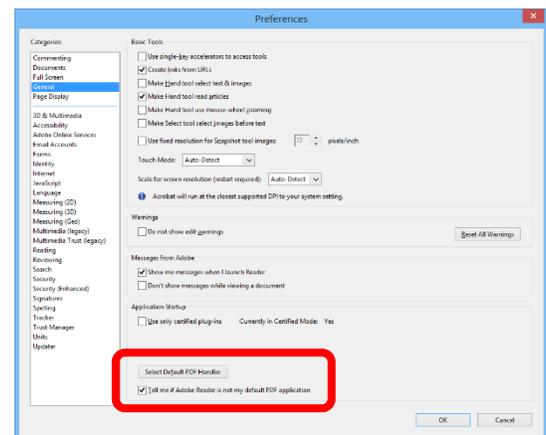
User Guide

If the procedure above doesn't fix it, try this:

1. After starting P2A, hover over the icon on the Taskbar. A larger thumbnail of the program should be visible.
2. Right-click that larger thumbnail.
3. Select Mover.
4. Hold down the right Arrow key on the keyboard until the program comes into view. If that doesn't work, hold down the left arrow.
   COMMENT: *This method usually works when the program is lost in a multi-display environment.*

Finally, if neither of the two [2] previous processes worked, here's a third way to try and fix the problem:

1. Close P2A.
2. Open the AppConfig.xml file.
3. Find the following entries:

```
<AppSetting>
  <Name>MainScreenX</Name>
  <Value>2</Value>
  <LastChanged>2017-03-15T11:09:11.0412178-05:00</LastChanged>
</AppSetting>
<AppSetting>
  <Name>MainScreenY</Name>
  <Value>11</Value>
  <LastChanged>2017-03-15T11:09:11.0477241-05:00</LastChanged>
</AppSetting>
```

4. Change both `<Value>`X`</Value>` settings to 2.
5. Save the file.
6. Start P2A.

This should have the window open at position 2, 2 when you restart the program.

Windows 8 | 10 Language Settings

To check the setup for Windows 8, 8.1 or 10, do the following:

1. Open Windows Settings.
2. Select Time & Language.
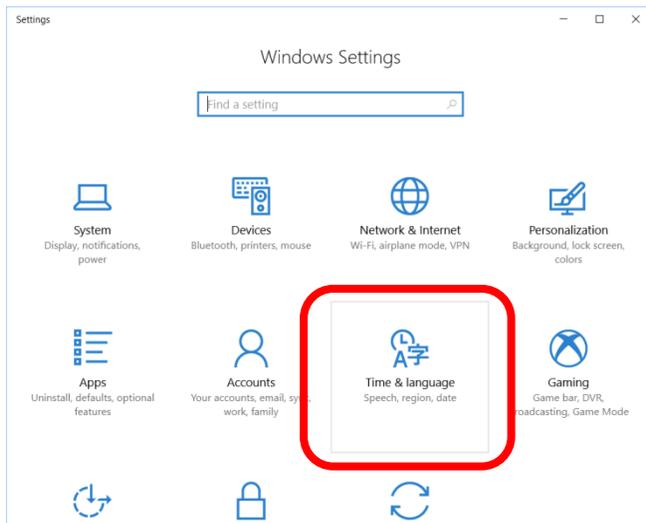
User Guide

3. Select Region & Language.
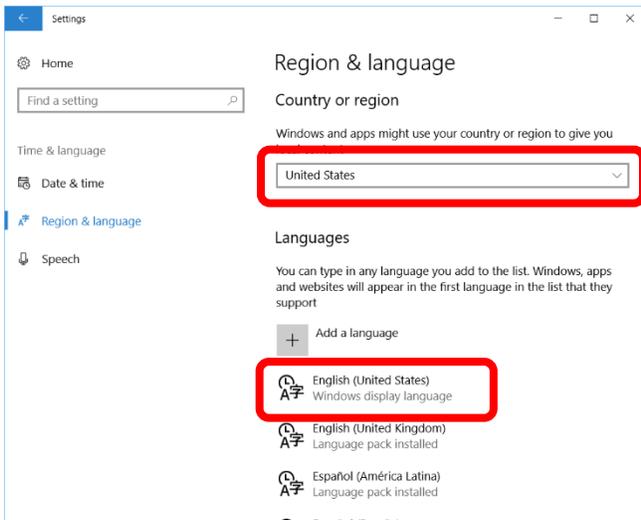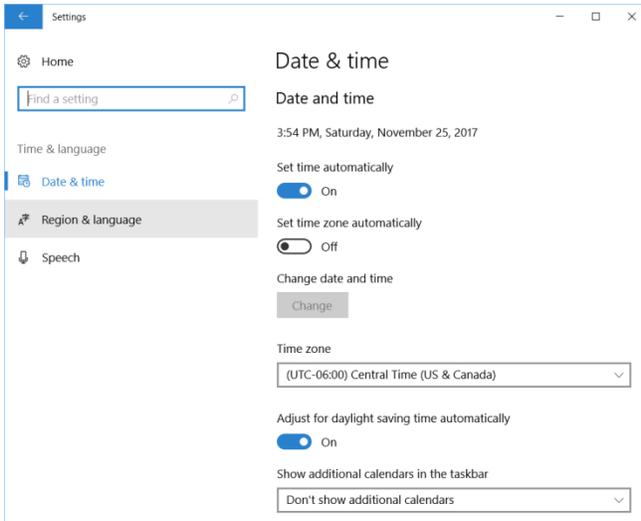
Ensure that *United States* is selected in the Country or region drop box – and that *English (United States)* is at the top of the Languages list.
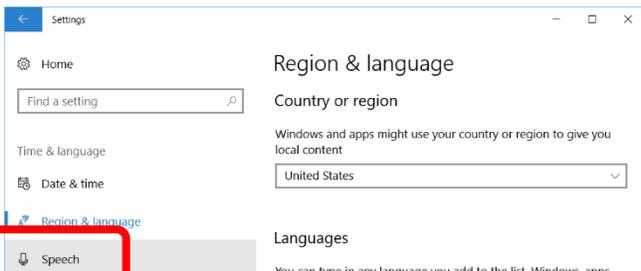
Click on the Speech Link on the left side of the page
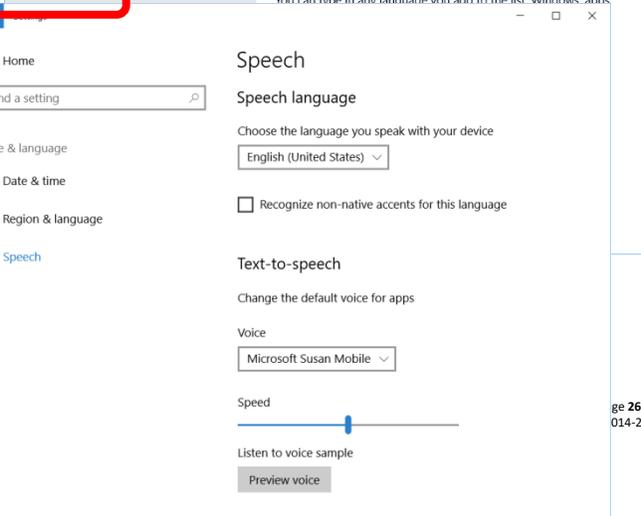
User Guide

Be sure *English (United States)* is set as the Speech language. You might also benefit from checking the "Recognize non-native accents for this language" option, as well.

Installing a New Language in Windows 8 or 10
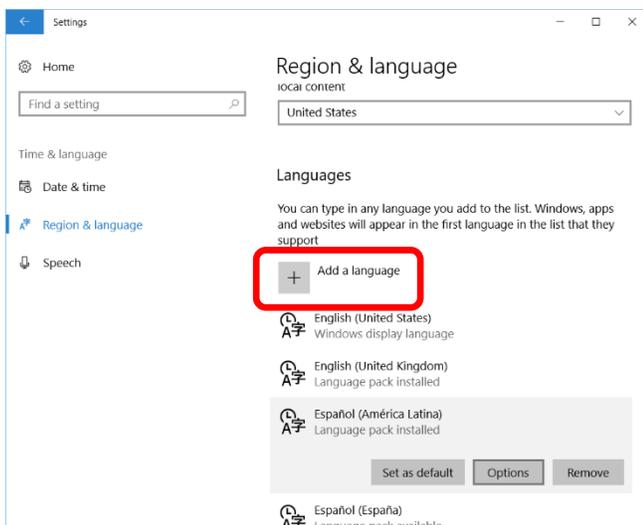
This section will illustrate how to install a new language in Windows 10. We'll add Spanish-Spain to a PC already having other languages installed. You use the same process to install English-US to your PC.

Start by going to Windows Settings -> Region and Language.

Click on Add a language.
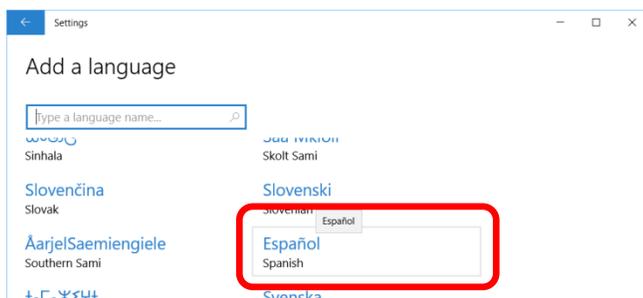
Scroll down to the language you want and click on it. In this case, we clicked on Spanish.
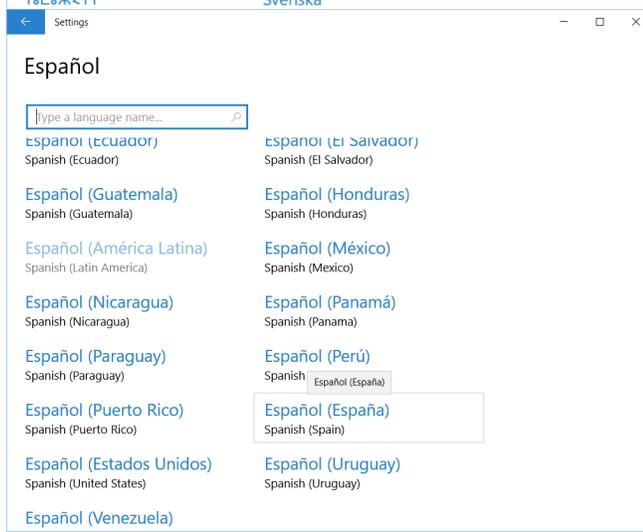
Find the type of Spanish you want. In this case, we choose *Español (España)* for Spain.

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It'll be added to your list as "available".
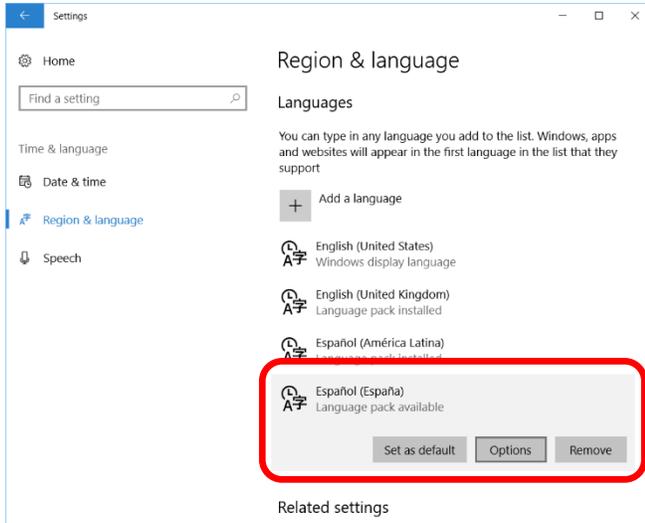
Click on the Language – and then the Options button.
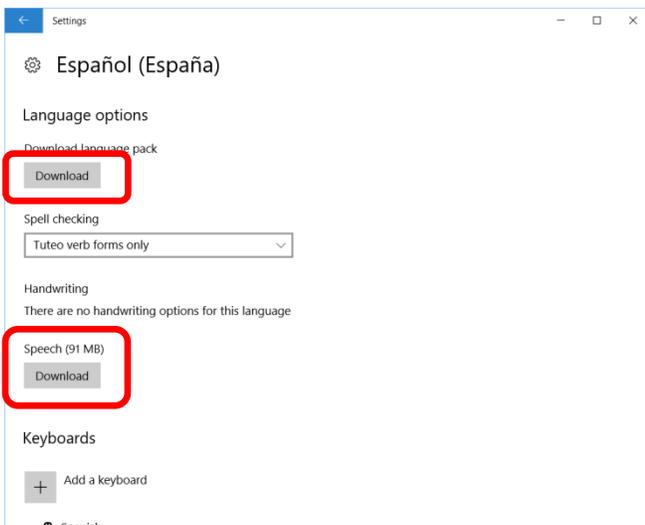
Only if this is the first time opening the options, you'll see a button to Download Speech. If the language pack has already been installed, you might have to delete it and add it again to see this button.

Click on this button and it'll install any Mobile and Desktop Speech Voices associated with that language and region. In this case, we get Helena.

Most of the languages don't seem to have this button, in which case, there are no specific speech engine or voices available for that language pack.

You don't have to download/install the language pack to get the voice(s) – just the Speech button.

User Guide

Windows 7 Language Settings

To check your Windows 7 Language Settings, do the following:

- Open the Windows Control Panel.
- Select the Region and Language function. You'll see a screen similar to the one below.
- If the Format is not *English (United States)*, select that in the Format Dropdown.
- Click OK – and then test to see if this fixed the issue.
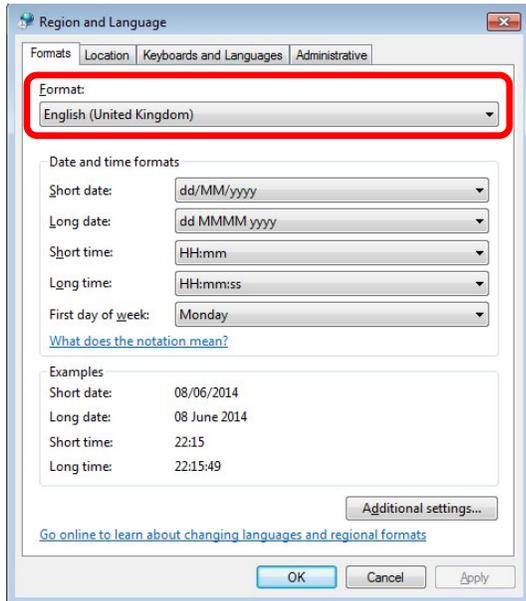
Windows Location:

- Next, select the Location tab.
- Set the Current location to *United States* in the Current Location Dropdown.
- Click OK – and test again.
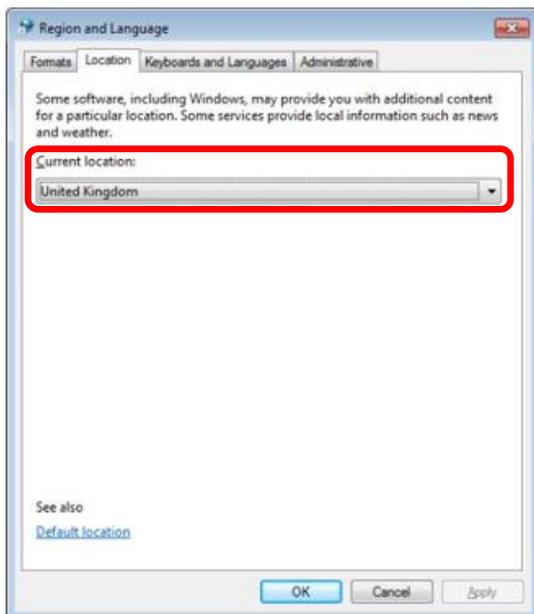
User Guide

In many versions of Microsoft® Windows, it's possible to install additional SAPI5 Desktop voices. It's part of the Language Pack installation process.

NOTE: *Only a few of the Language Packs have additional Desktop voices associated with them.*

If you want to this, start by going to Windows Settings -> Region and Language.
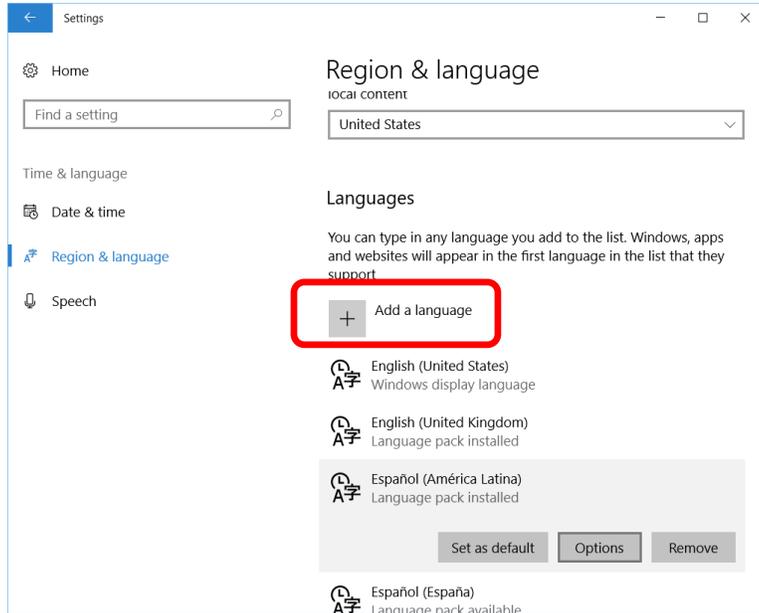

Click on Add as language.
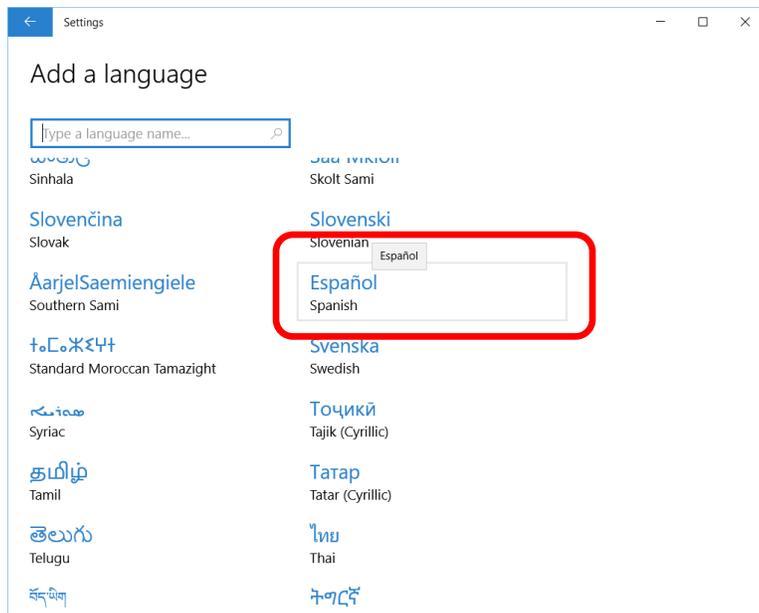
Scroll down to the language you want and click on it. In this case, we clicked on Spanish.

User Guide
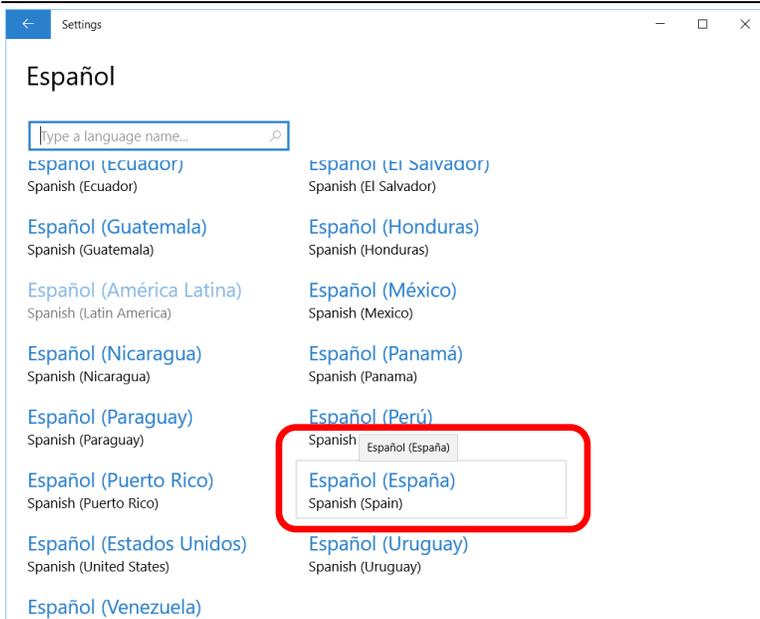
Find the type of Spanish you want. In this case, we choose Español (España) for Spain. It'll be added to your list as "available".
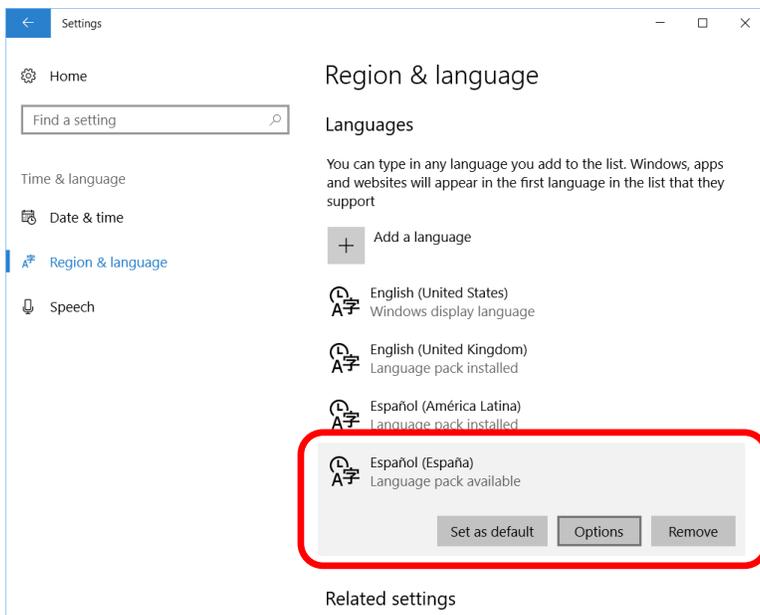
Click on the *Language* and then the *Options* button.

User Guide
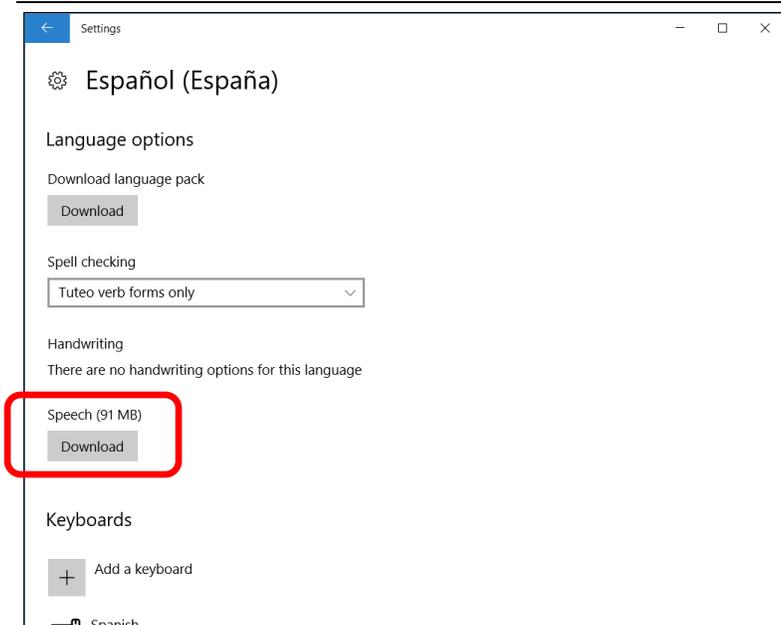
Only if this is the first time to open the options, you'll see a button to Download Speech. If the language pack has already been installed, you might have to delete it and add it again to see this button.

Click on *Download* button and it'll install any Mobile and Desktop Speech Voices associated with that language and region. In this case, we get Helena.

Most of the languages don't seem to have this button, in which case there are no specific languages available for that language pack.

You don't have to download/install the language pack to get the voice(s) – just the Speech button.

You won't see the Desktop languages listed in the Windows choices. I don't know why, but it's true... they only show the Mobile voices.

After installing, if you start P2A, go to the Voices tab and look in the dropdown. There, you'll see any new Desktop voices added. In this case, we got Helena.