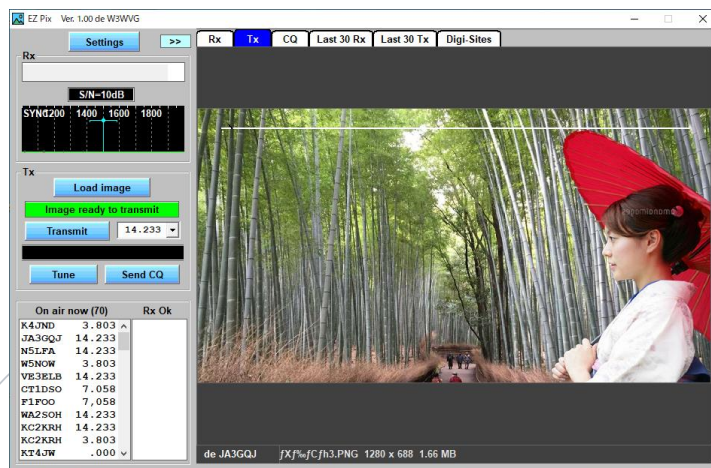


My experience report use of EZ Pix

EZ Pix is an image communication software for radio amateurs developed by Richard W3WVG.



JA3GQJ

Table of Contents

1. Introduction	.....2
2. About EZ Pix (as I understand it)	.....2
EZ Pix usage environment	.....2
3. EZ Pix Usage Preparation	.....3
3-1 EZ Pix Settings	.....3
3-2 Starting EZ Pix	.....7
3-3 Closing EZ Pix	.....8
4. Operation	.....8
4-1 Transmission	.....8
4-1-1 Tuning	.....8
4-1-2 Preparing Transmission Images	.....8
-CQ Image 1 -CQ Image 2 -Image Exchange 1 -Image Exchange 2	
4-1-3 Transmission with FT-991	.....10
-Connecting EZ Pix and FT-991	
-Transmission Procedure with EZ Pix and FT-991	
4-1-4 Transmission with Peanut	.....11
-Connecting EZ Pix and Peanut t -Transmission procedure of Peanut	
4-1-5 Transmission with Client Peanut	.....12
-Connecting EZ Pix and Client Peanut	
-Transmission Procedure with EZ Pix and Client Peanut	
4-1-6 Transmission with Discord	.....12
-Connecting EZ Pix and Discord	
-Transmission Procedure with EZ Pix and Discord	
4-2 Reception	.....13
4-2-1 Reception Successful	.....13
4-2-2 Reception Failure	.....13
4-2-3 About Rx Tags	.....14
5. Other Tags	.....15
5-1 Last 30 Rx Tags	.....15
5-2 Last 30 Tx Tags	.....15
5-3 Digisite Tags	.....16
-Removing Station from List -Adding Station to List	
6. Various Comments Screens that popped up during use	.....17
7. Conclusion	.....17
Appendices	.....18

1. Introduction

While watching FT8 on 7.172 MHz, I received an image with the text "EZ Pix". I quickly searched for it on the internet and downloaded it from Richard W3WVG's page.

It seems to be a software for exchanging images using standardized GMSK mode text through a commercial transceiver, but I also found out that it works smoothly with internet conversation software such as Peanut and Discord. Here, I would like to summarize my experience report using it.

2. About EZ Pix (My understanding)

FTP server is the key point for using EZ Pix. This is because EZ Pix uploads (transfers) the image from the sender to the folder automatically generated by the FTP server and saves it there. Then, the receiver decodes the GMSK signal containing standardized characters sent by the sender and downloads the image from the folder specified by the sender to display it on the computer screen. Although EZ Pix is originally software used on-air with a transceiver, a few of us are using it with internet conversation software.

That is Peanut or Discord. I don't understand the theory behind it, but it's interesting that not only voice signals but also GMSK signals can be used on the internet.

EZ Pix Usage Environment

2-1 FTP Server : A free rental ftp server is required using EZ Pix to save and exchange images.

2-2 Computer : OS Windows10

Processor: Intel(R) Core(TM) i3-4150 CPU @ 3.50GHz

Installed RAM: 4.00 GB

System type: 64-bit operating system

2-3 DigiSites : Although it is a standalone software developed by Richard W3WVG for generally publishing received images, EZ Pix has that function.

2-4 Peanut : To use EZPix over the Internet with the software "Peanut" developed by David PA7LIM.

2-5 Client Peanut : To use EZPix over the Internet with the software "Client Peanut" developed by AA.by Fernando LW6EMN

2-6 Discord : Use EZPix over the internet using Discord. For Discord, visit the Internet Discord website.

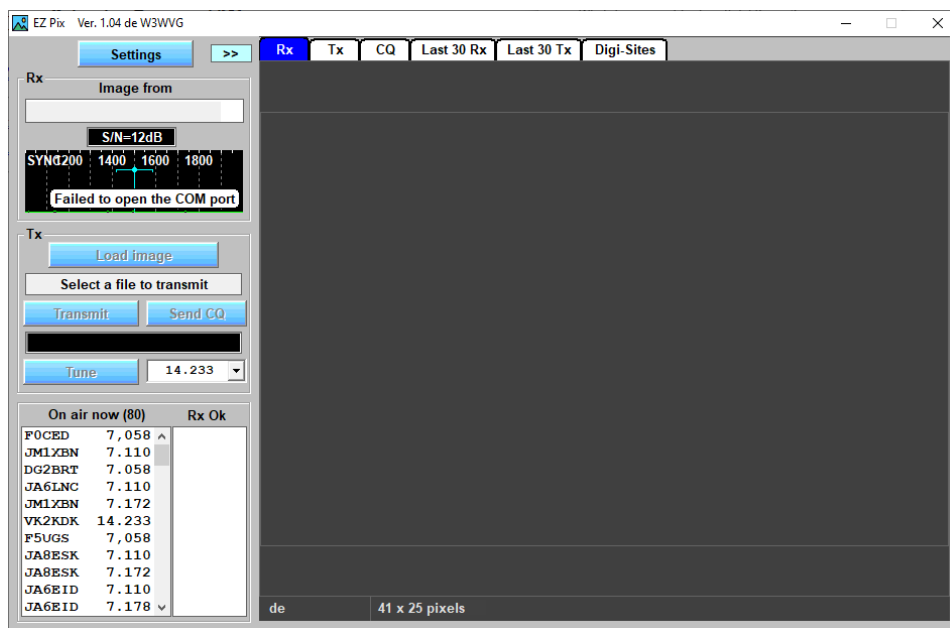
2-7 Yaesu FT-991 : EZ Pix is used on the air with this transceiver. Connect to a computer with a USB cable and I refer to the setup articles for internet software such as JTDX (WSJTX).

Devices and software that can use EZ Pix



3. Preparing to use EZ Pix

Once the software has been downloaded and installed by referring to the Appendix at the end of the book, EZ Pix will launch automatically as shown in Fig. 3-1. Only the "Settings" button works.



3-1 EZ Pix settings

Click the "Settings" button in Fig. 3-1-1 → then click "EZ Pix Setting" in the pop-up list → the settings screen (Fig. 3-1-2) will open.

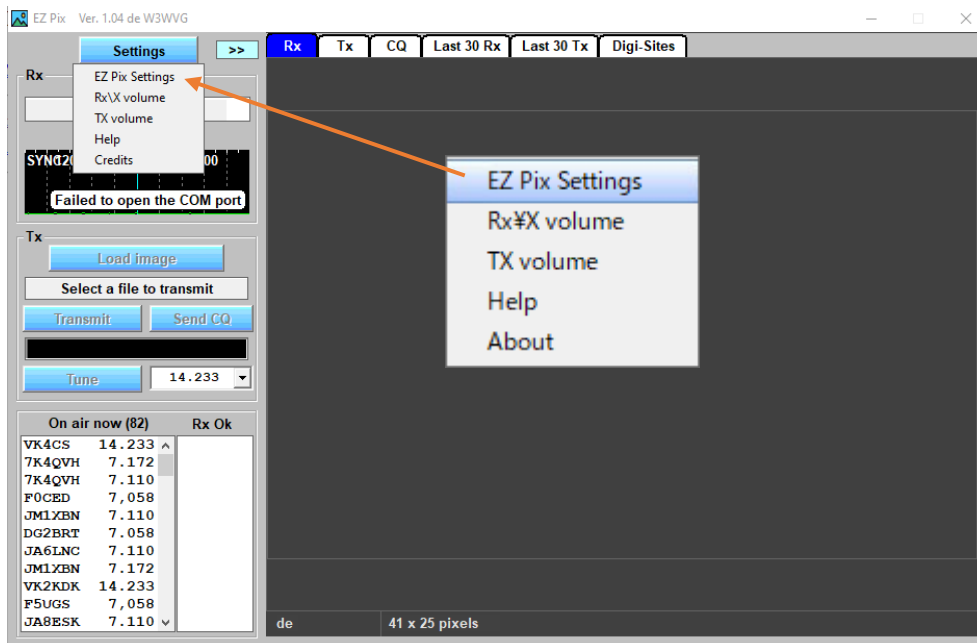


Fig. 3-1-1

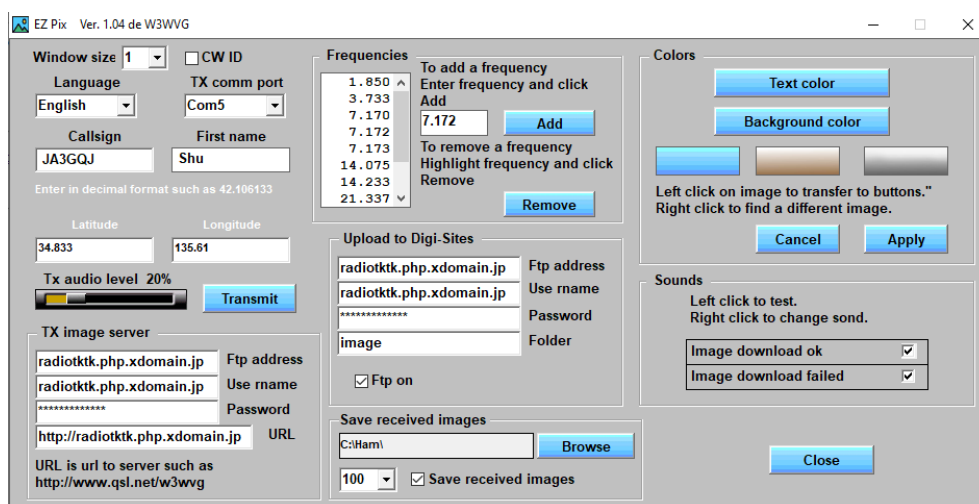


Fig. 3-1-2

Next is an explanation of the necessary items to be entered, such as how to input items corresponding to the setting screen (Fig. 3-1-2).

Window Size = default "1".

CW ID = Unchecked because it is not sent.

Callsign = Enter your station's callsign in uppercase. If you try to enter it in lowercase, a comment will appear stating that it must be in uppercase, as shown in Fig. 3-1-3.

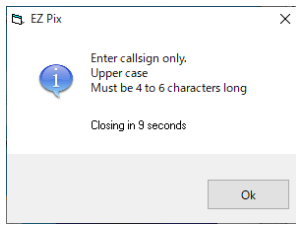


Fig. 3-1-3

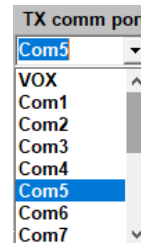


Fig. 3-1-4

Tx Comm Port = Select "Com5" from the pull-down menu (Fig. 3-1-4) because I have installed the "CP210X Universal Windows Driver" virtual COM port driver for FT991. When using with Peanut, Client Peanut or Discord on the Internet, or when using "Signalink" or similar devices attached to the radio, select "VOX."

First name = Enter your first name.

Language = English should be selected

Tx audio level = Adjust the transmission volume through trial and error because it depends on the relationship between the sound card's speakers and microphone.

Transmit = Click this transmit button to send.

Frequencies frame

Add button = Enter the desired operating frequency in the blank space to the left of button, and click this button to add the desired frequency to the list.

Remove button = Select the frequency from the left list and click this button to remove it.

Colors frame

Background color button = You can change the background color on the pop-up screen by clicking this button, but leave it as the default.



Fig.3-1-5

Left click on image to transfer to buttons.

Right click to find a different image

Cancel button

Apply button

Sounds frame

Image download ok = When there is a checkmark, a sound will play to indicate that the image download (reception) is OK. You can check the sound by left-clicking here. You can also change the sound (WAV file) by right-clicking.

Image download failed = When there is a checkmark, a sound will play to indicate that

the image download (reception) failed. You can check the sound by left-clicking here. You can also change the sound (WAV file) by right-clicking.

TX Image Server Frame:

FTP Address = Enter the address of the rented FTP server.

Username = Enter the username of the rented FTP server.

Password = Enter your own password for the rented FTP server.

Upload to Digi-Sites Frame:

FTP address = Enter the same address as TX Image Server.

User name = Enter the same username as TX Image Server.

Password = Enter the same password as TX Image Server.

Folder = Received images are stored in a folder on the Digi-Sites server. In my case, I enter the folder name "image" that I created. Leave this blank if you did not create a folder(Incoming images are probably stored in the root directory.).

FTP On = When checkmark is here, the received images will be automatically uploaded to the configured Digi-Sites. Remove the checkmark to prevent the images from being uploaded.

Close button = Click this button when you have finished entering the necessary data to close the window and return to the operating screen (Fig. 1-2). The input data will be saved automatically. Click the "Settings" button in Fig. 3-2-1 to show the list and select "Help" then you can see the "Installation and Settings" instructions. Click "About" to view an overview of EZ Pix.



Fig. 3-1-6:

When the settings are complete, the faint invisible characters (Fig. 3-1-6) on each button become clear and each button becomes functional. Clicking the ">>" button to the right of the "Settings" button in Fig. 3-1 switches the display of the operation buttons to the right (Fig. 3-1-7).

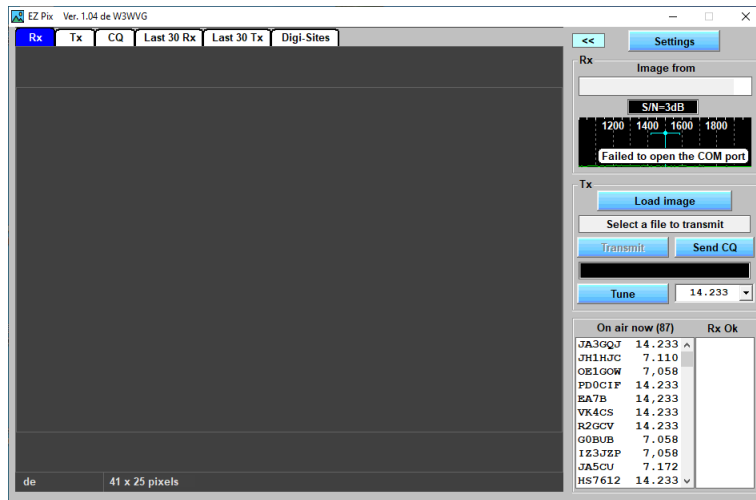


Fig. 3-1-7:

3-2. Starting EZ Pix:

After completing the EZ Pix configuration, → close EZ Pix. → then a disk icon like the one shown in Fig. 3-2-1 will be generated on your computer's desktop. → then right-click on the icon to continue → ✖

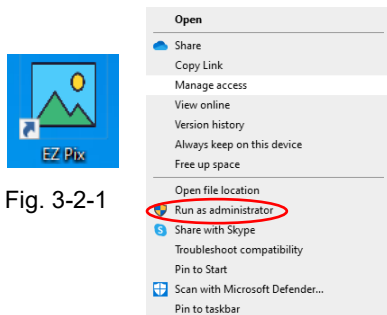


Fig. 3-2-1

✖ Then the screen on the left (Fig. 3-2-2) will appear.

Click "Run as administrator" when it after running the software as administrator an operation screen like Fig. 3-2-3 pops up.

Fig.3-2-2



Fig. 3-2-3

3-3. Closing EZ Pix

Click the "X" on the upper right of the screen → Then display "Deleting files" (Fig. 3-2-4) → Then display "73 de W3WVG" (Fig. 3-2-5) → Then close the EZ Pix



Fig.3-2-4



Fig.3-2-5

4. Operation

4-1. Transmission

4-1-1. Tuning

When use a transceiver, Peanut or Discord, and even when sending a CQ call or exchanging images during QSO, use the "Tune" button on the operation screen to emit a tone and check the strength of the image signal. Clicking the "Tune" button changes the display to "Stop," and clicking it again stops the tuning process.

4-1-2. Preparing transmission images

• CQ image 1

Click on the "CQ" tag on the screen that appears immediately after installing the software (Fig. 4-1-2-1), and a text-only image will be displayed. Right-click on the screen and click "Choose CQ Image" from the pop-up list. The folder where the images are saved (Fig. 4-1-2-4) will open. Double-click on the image

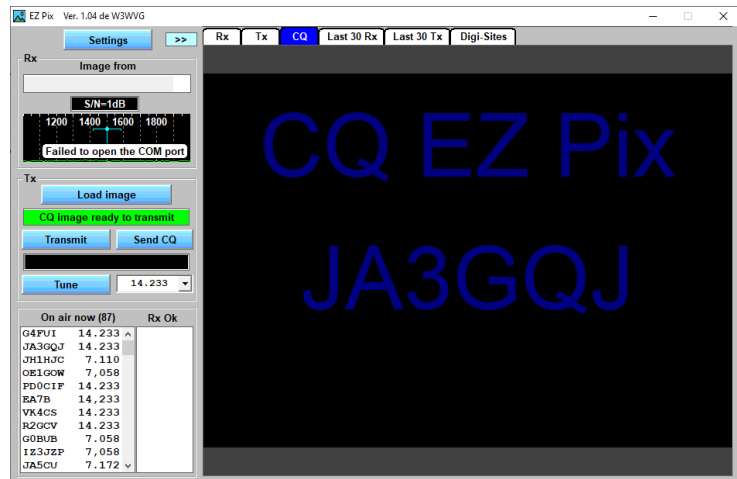


Fig. 4-1-2-1

you want to load, and it will be displayed on the CQ tag screen. Click the "Send CQ" button to transmit, and the transmission will be completed in about 6 seconds. When you right-click on the screen and select "Font option" from the pop-up list, you can change the font size and color, but not the text.

• **CQ image 2**

Click on the "CQ" tag on the normal screen (Fig.4-1-2-2), and the image with the text used last time will be displayed. Right-click on the screen and click "Choose CQ Image" from the pop-up list. The folder where the images are saved (Figure 4-1-2-3) will open. Double-click on the image you want to load, and

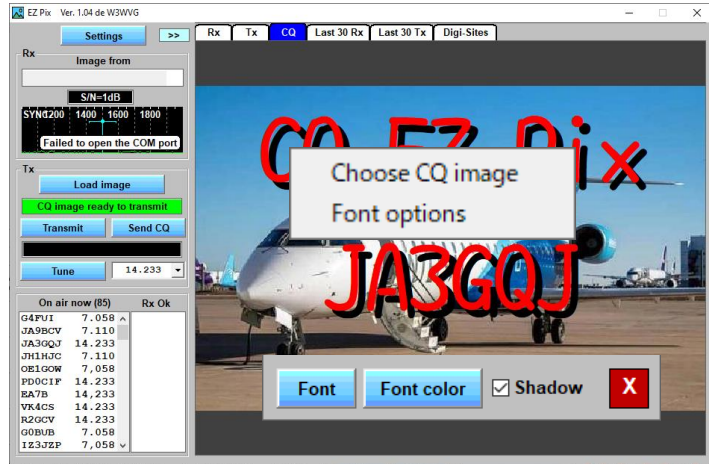


Fig. 4-1-2-2

it will be displayed on the screen. Click the "Send CQ" button to transmit, and the transmission will be completed in about 6 seconds.

When you right-click on the screen and select "Font option" from the pop-up list, you can change the font size and color, but not the text.

• **Image exchange during QSO 1**

During QSO, click the "Load image" button on Fig. 4-1-2-3, and the folder where the images are saved (Fig. 4-1-2-4) will open. Double-click on the image you want to transmit, and it will be loaded and displayed on the TX tag screen.



Fig.4-1-2-3

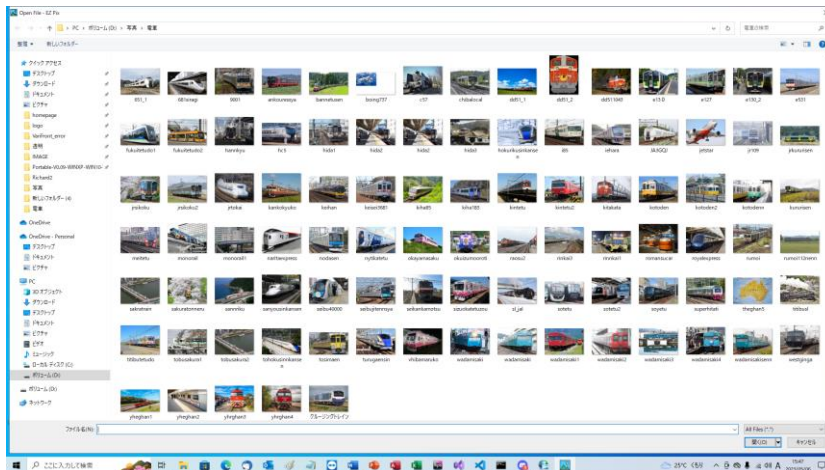


Fig. 4-1-2-4

• **Image exchange during QSO 2**

Copy the image from the folder with the mouse, right-click on the TX tag screen, and click "Paste image to TX window" on Fig. 4-1-2-5. The image will be pasted on the TX tag screen, and the preparation will be completed. A comment saying "Image ready to Transmit" will also appear below the "Load image" button.

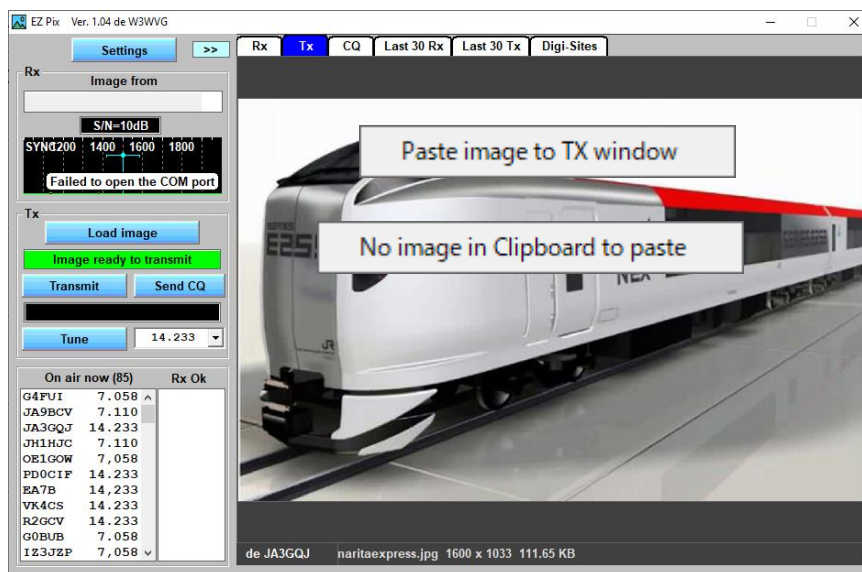


Fig. 4-1-2-5

If you haven't copied the image with the mouse, the message "No image in Clipboard to paste" will appear, and the image cannot be pasted.

4-1-3 Transmission with FT-991

• **Connecting EZ Pix and FT-991**

The FT-991 was connected to EZ Pix using a commercially available USB cable for printers, and the settings of JTDX were configured by referring to an article on the Internet.



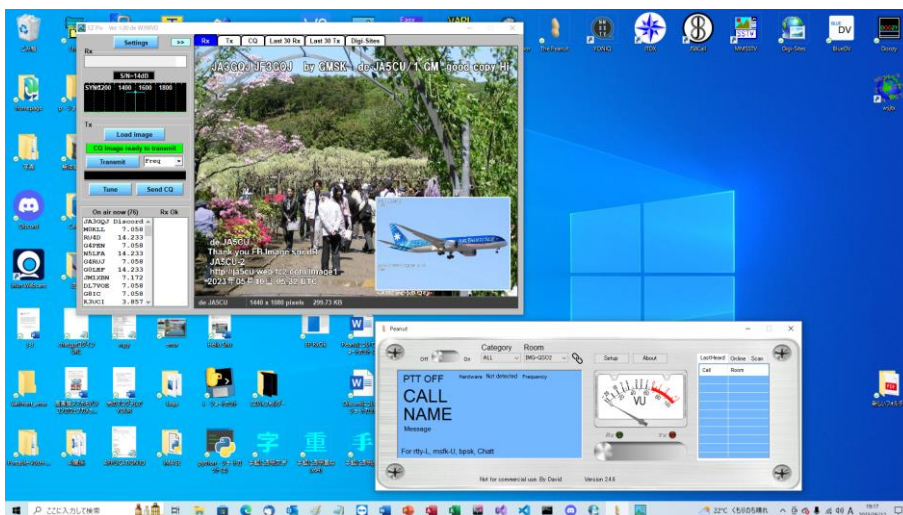
• **Transmission procedure of FT-991**

Select the frequency to use from the frequency list on the right side of the send button on the operation screen (Figure-4-1-1-1), and set the frequency of the FT-991. Press the "TUNE" button on the FT-991 and use the antenna tuner to adjust to the optimum state matching with the antenna. After that, when you press the EZ Pix button, the PTT of the FT-991 will start and transmission will start, and the call sign of the receiving station and the number of stations will be displayed in the "Rx OK" column at the bottom left of the screen(Fig.4- 1-2-5).

4-1-4 Transmission with Peanut

• **Connecting EZ Pix and Peanut**

Start both software on your computer and make sure they share the computer's sound card. Check the "RZ Pix settings" and the "Peanut" guidebook for details.



• **Transmission procedure of Peanut**

Turn on Peanut's PTT, click the "Sent Image" button of EZ Pix, and start transmitting. After about 6 seconds, the transmission will end. Turn off the PTT of Peanut, and the callsign and station number of the receiving stations will be displayed in the "Rx Ok" field at the lower left of Figure-4-1-2-5. The frequency selection is not necessary as the operating frequency is set to IMG-QS02. Set the COM port in EZ Pix to VOX to avoid the comment "Failed to open the COM port" on the reception waiting screen.

4-1-5 Transmission with Client Peanut

• Connecting EZ Pix and Client Peanut

Start both software on your computer and make sure they share the computer's sound card. Check the "RZ Pix settings" and the "Client Peanut" guidebook for details.



• Transmission procedure of Client Peanut

Turn on the PTT of Client Peanut, click the "Sent Image" button of EZ Pix, and start transmitting. After about 6 seconds, the transmission will end. Turn off the PTT of Client Peanut, and the call sign and station number of the receiving station will be displayed in the "Rx OK" field at the lower left of Figure-4-1-2-5. The frequency selection is not necessary as the operating frequency is set to IMG-QSO2. Set the COM port in EZ Pix to VOX to avoid the comment "Failed to open the COM port" on the reception waiting screen.

4-1-6 Transmission with Discord

• Connecting EZ Pix and Discord

Start both software on your computer and make sure they share the computer's sound card. Check the "RZ Pix settings" and the "Discord" guidebook for details.



• Transmission procedure of Discord

Discord has a VOX function, so click the "Sent Image" button of EZ Pix to start transmitting. After about 6 seconds, the transmission will end, and the call sign and number of stations of the receiving station will be displayed in the "Rx Ok" field at the lower left of Fig.-4-1-2-5. To send a CQ, click "Send CQ...o. "

4-2. Reception

4-2-1 Reception Successful

When start EZ Pix, receive a GMSK signal from your walkie-talkie, Peanut, Discord, etc. The S/N ratio and signal waveform are displayed on the left side of the screen. A successful reception tone sounds and the message "Downloading images" flashes. The received image is displayed in the RX tag (Fig. 4-2-1), and the call sign and transmitting station name are displayed in "Rx" (below the setting button) on the left side of the screen. The "On air now" list (the number in brackets is the number of stations) is always displaying (Fig. 4-2-1 below).

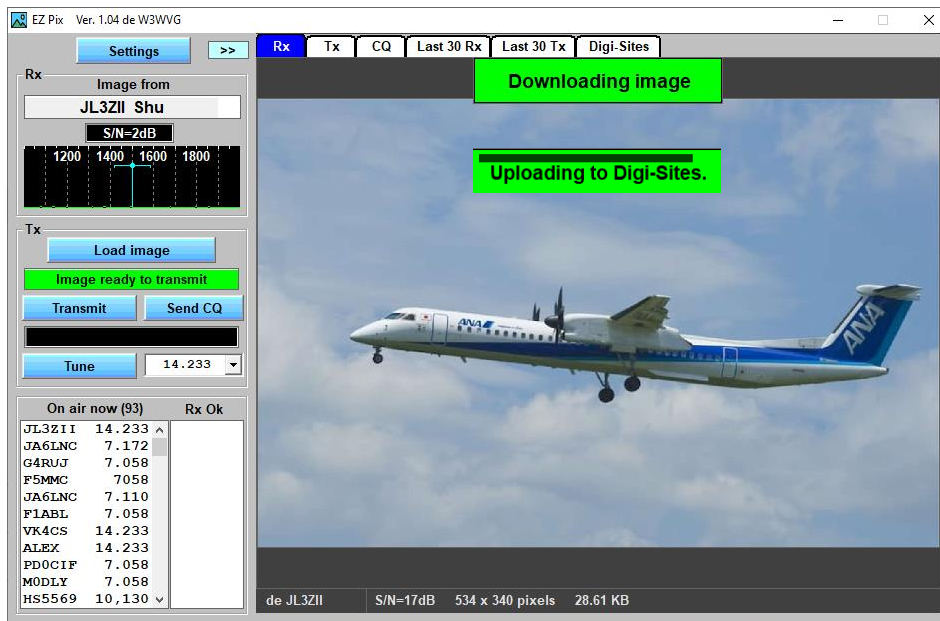


Fig. 4-2-1

4-2-2 Reception Failed

To start EZ Pix, it will receive GMSK signals from Radio, Peanut, Discord, etc. The S/N ratio and signal waveform are displayed on the left side of the screen. If the image could not be retrieved, an error sound will be played and the message "Failed to download image" will appear and disappear. Therefore, received images are not displayed on the RX tag (Fig. 4-2-2). In this case, I suspect the setting of the URL of the ftp server on the sending side.

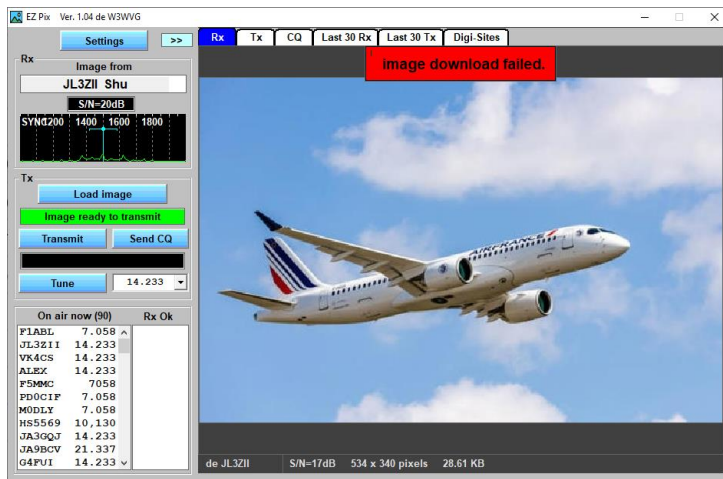


Fig.4-2-2

When you right-click the "On air now" list at the bottom left of Fig. 4-2-1, a pop-up window with a view URL list option appears (Fig. 4-2-3). This option displays the URL that each station entered in the EZ Pix settings screen and sorts them alphabetically or by newest or oldest on top.

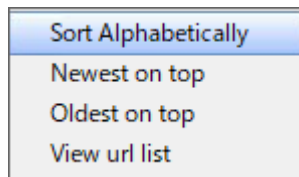


Fig. 4-2-3

4-2-3 About the RX tag

The received image is displayed. When you right-click the "Rx" tag screen (Fig. 4-2-1-3), a small window pops up with four options: copy, save, and two others.

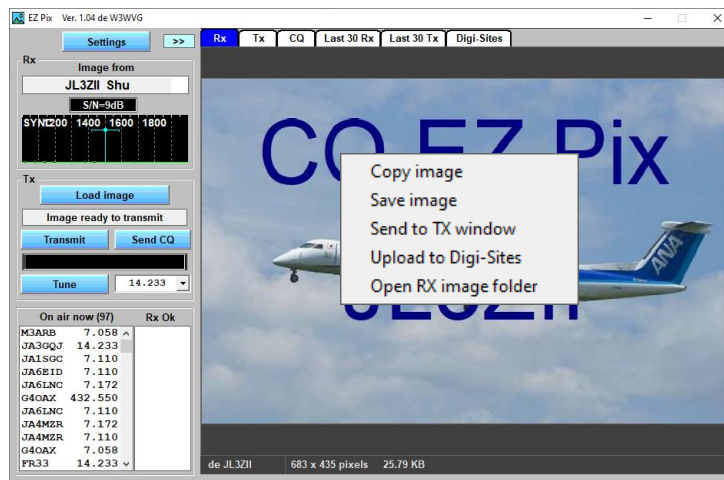


Fig. 4-2-3-1

5. About Other Tags

5-1 Last 30 Rx Tag

The thumbnails of the last 30 received images are displayed on the screen of the "Last 30Rx" tag (Fig. 5-1-1). Right-clicking on this screen will pop up a small window with four functions can be selected from: copying or saving images, pasting to TX tag, and uploading to Digi-site

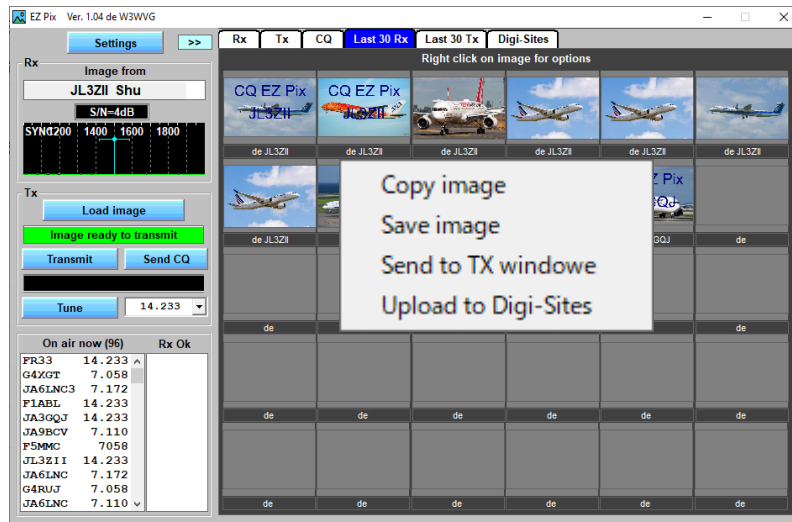


Fig. 5-1-1

5-2 Last 30 Tx Tag

The thumbnails of the last 30 transmitted images are displayed on the screen. Clicking on each image will enlarge it. Right-clicking on the screen will pop up a small window (Fig. 5-2-1) with three functions can be selected from: copying images, pasting to TX tag, and uploading to Digi-site.

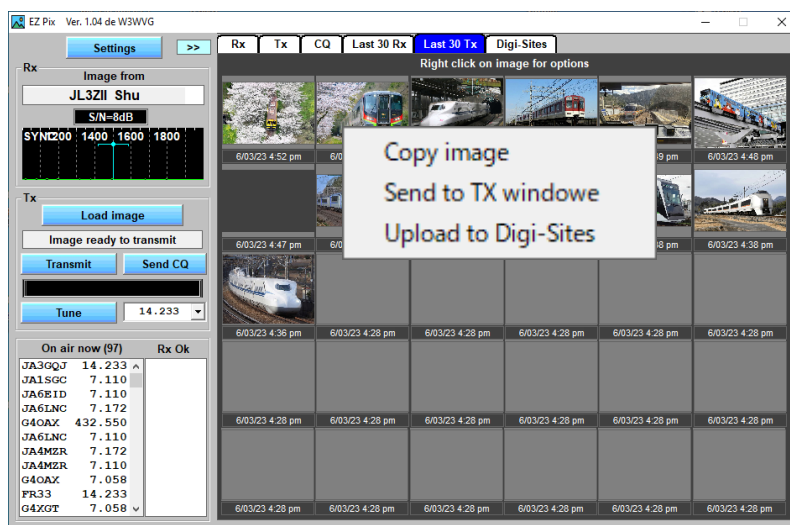


Fig. 5-2-1

5-3 Digisites Tag

The thumbnails of the received images by each station (default is several stations) whose URL of Digisites is registered in "Settings" of EZ Pix are displayed with their call signs.

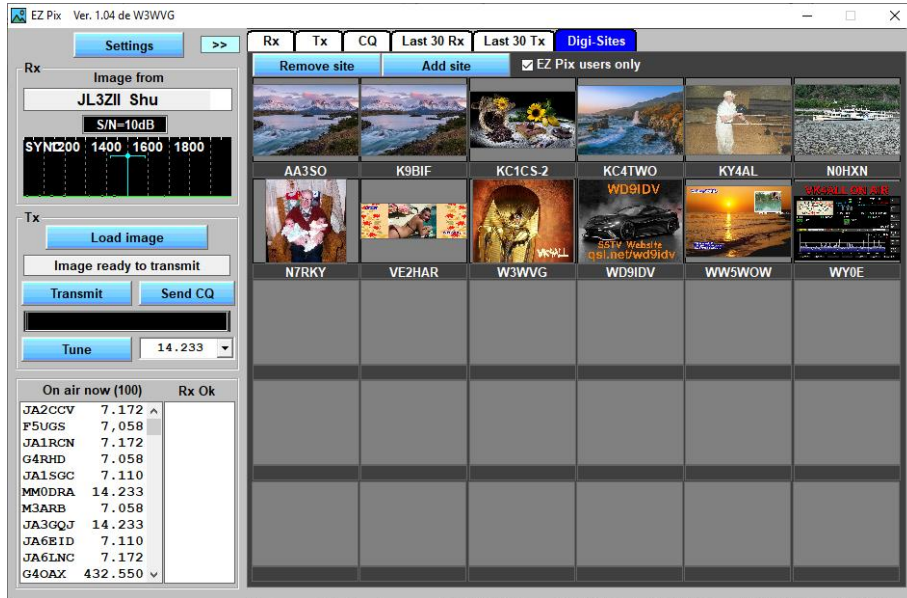


Fig. 5-3-1

Removing a station from the list:

Click on the "Remove site" button → Then the list of each station will be displayed (Fig. 5-3-2) → select the station to be removed → complete the removal.

Adding a station to the list:

Click on the "Add site" button → Then the list of each station will be displayed (Fig. 5-3-3) → Then select the station to be added → Then complete the addition.

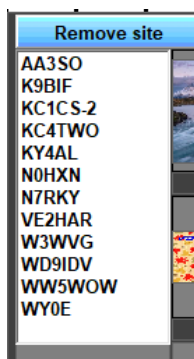


Fig. 5-3-2

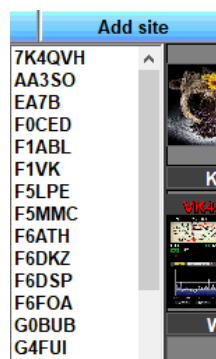


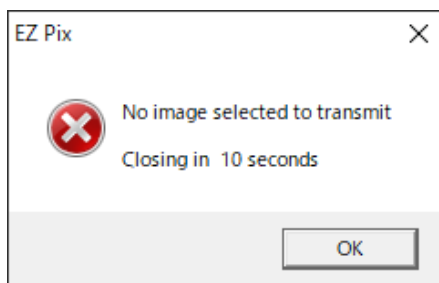
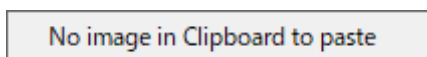
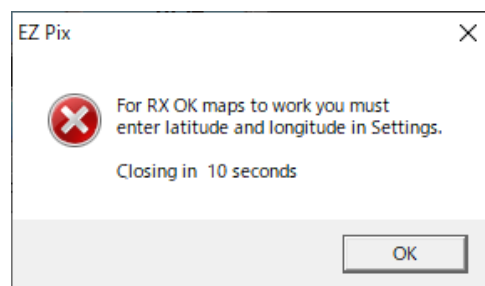
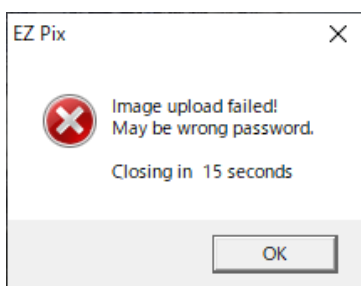
Fig. 5-3-3

Right-clicking a thumbnail displays 30 images of thumbnail received by that station. Also, click the thumbnail image to enlarge it. Click on another tag to close the thumbnails of the 30 images received by the station. If you check "EZPix users only", only image thumbnails of EZPix users will be displayed. If you check "EZPix users only", only image thumbnails of

EZPix users will be displayed. My guess is that because another independent Digisite software developed by Richard W3WVG may upload images received from users other than EZPix users (such as SSTV).

Digisite is usually used in combination with other image communication software, but EZ Pix incorporates this function from the beginning.

6. Various comment screens that popped up during use.



7. Conclusion

This report is just a summary of my experience. Therefore, I can't guarantee that it will work properly if you do it exactly like that, but I'd appreciate it if I could help you.

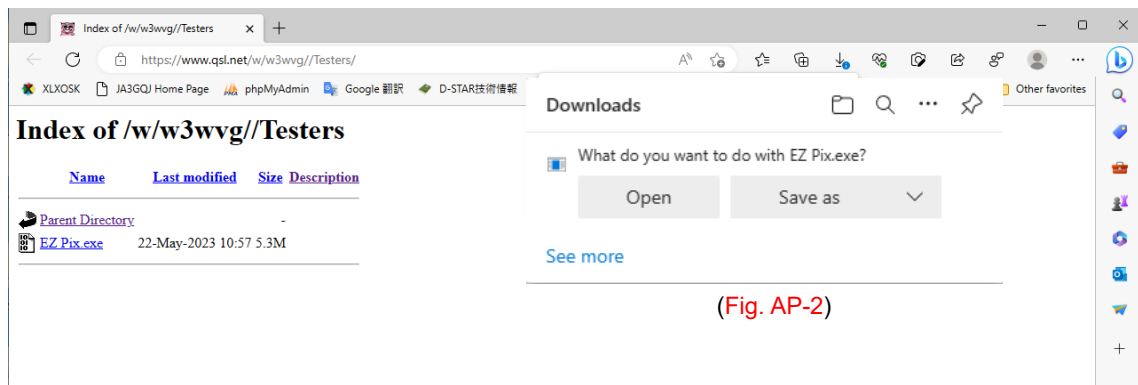
As of June 3, 2023

APPENDIX

Download and install EZ Pix software.

If you are unfamiliar with downloading software, especially downloading “exe” files can be confusing.

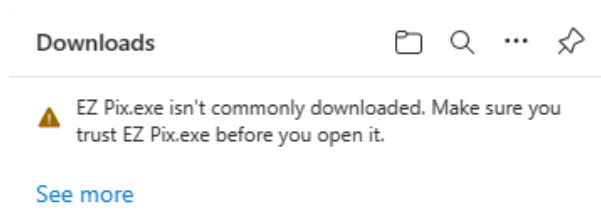
Click <http://www.qsl.net/w3wvg/Testers> while holding down the control key → Then Fig. AP-1 pops up → Then click EZ Pix.exe in the list on the left → Then Fig. AP-2 pops up → Then click "Open" → Then the screen changes to Fig.AP-3` → Then place the cursor on the text on the screen → ※1



(Fig. AP-1)

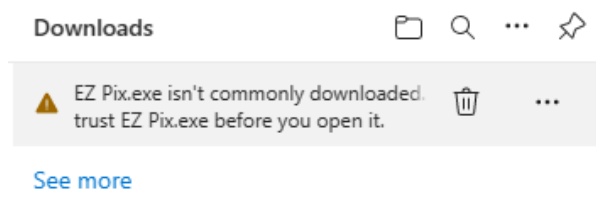
※1 → After that, follow the steps from Fig.AP-1-4 to Fig.AP-1-8 for complete the download.→ ※2

Place cursor on characters on the screen



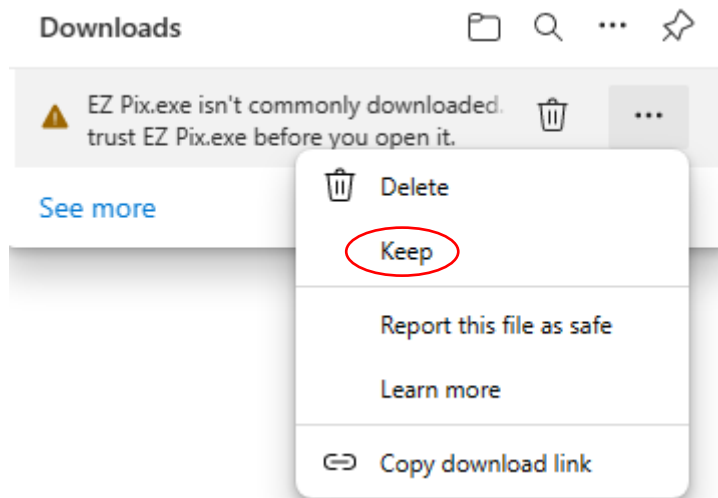
(Fig.AP-3)

Click the "... " next to the trash can icon



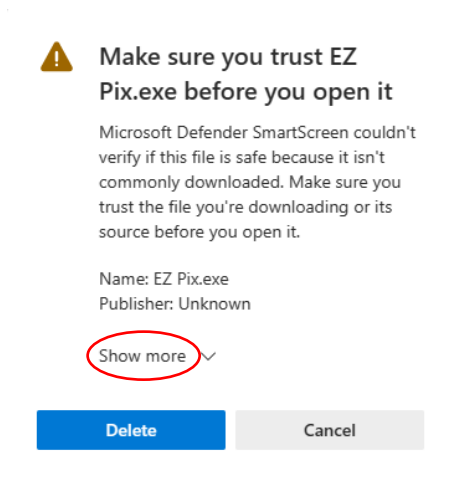
(Fig.AP-4)

Click "Keep"



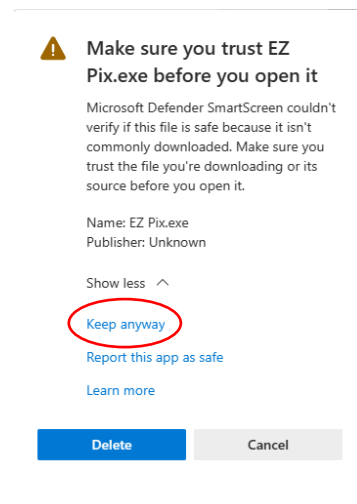
(Fig.AP-5)

Click "Show more"



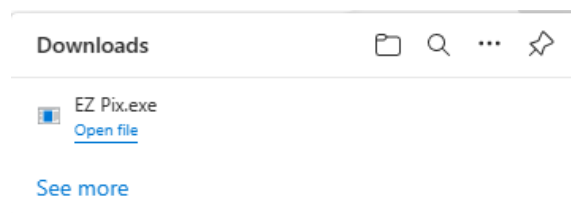
(Fig.AP-6)

Click "Keep anyway"



(Fig.AP-7)

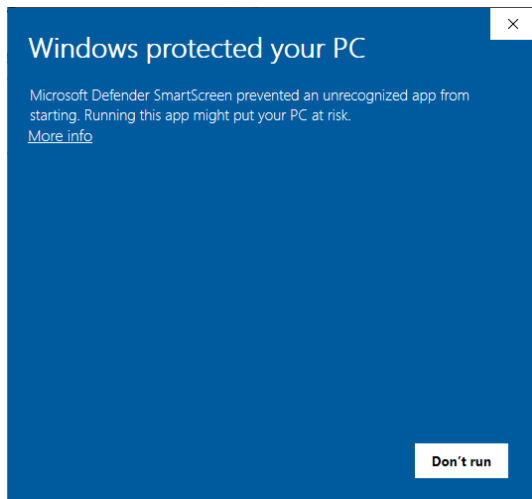
Download completed



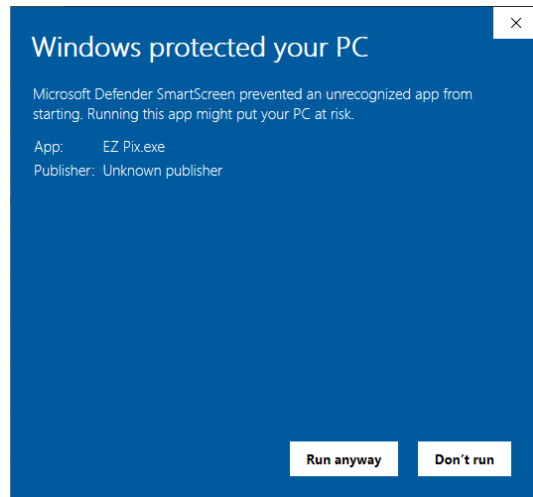
(Fig.AP-8)

Install

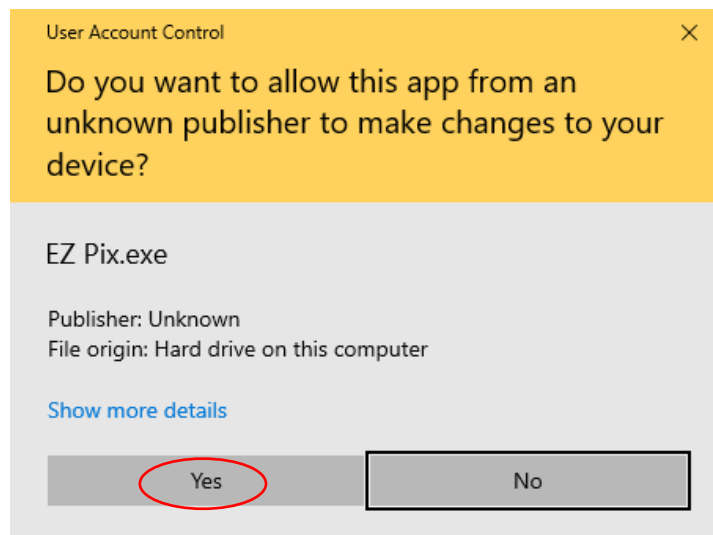
Click "Open File" in Fig. AP-8 → Then Fig. AP-9 pops up → Then click "More info" → Then Fig. AP-10 pops up → Then click "Execute" → Then Fig. AP-11 pops up → Then click "Yes" → After that, follow the steps from Fig. AP-12 to Fig. AP-26 to complete the installation.



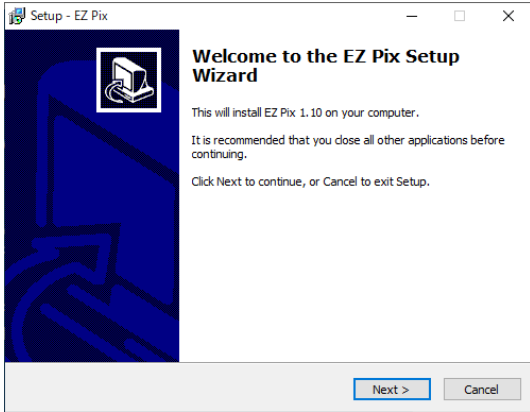
(Fig. AP-9)



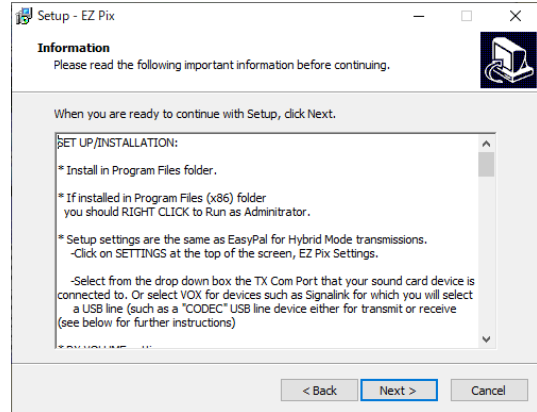
(Fig. AP-10)



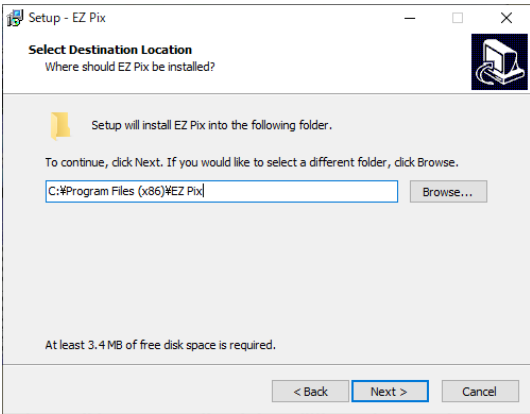
(Fig. AP-11)



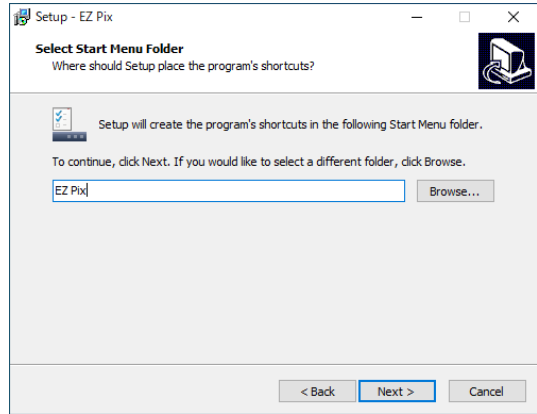
(Fig. AP-12)



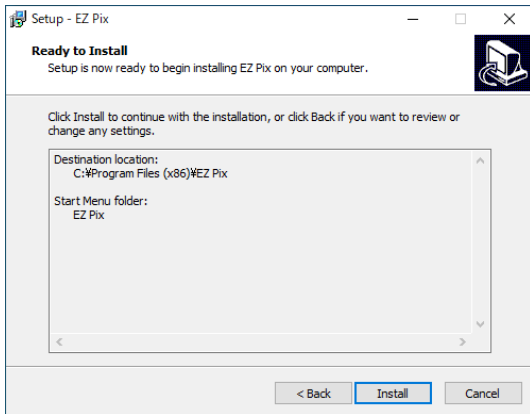
(Fig. AP-13)



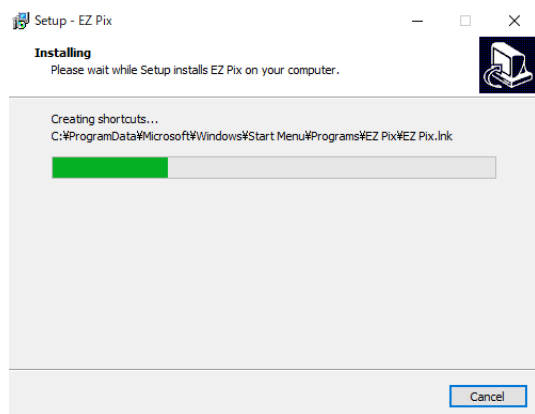
(Fig. AP-14)



(Fig. AP-15)



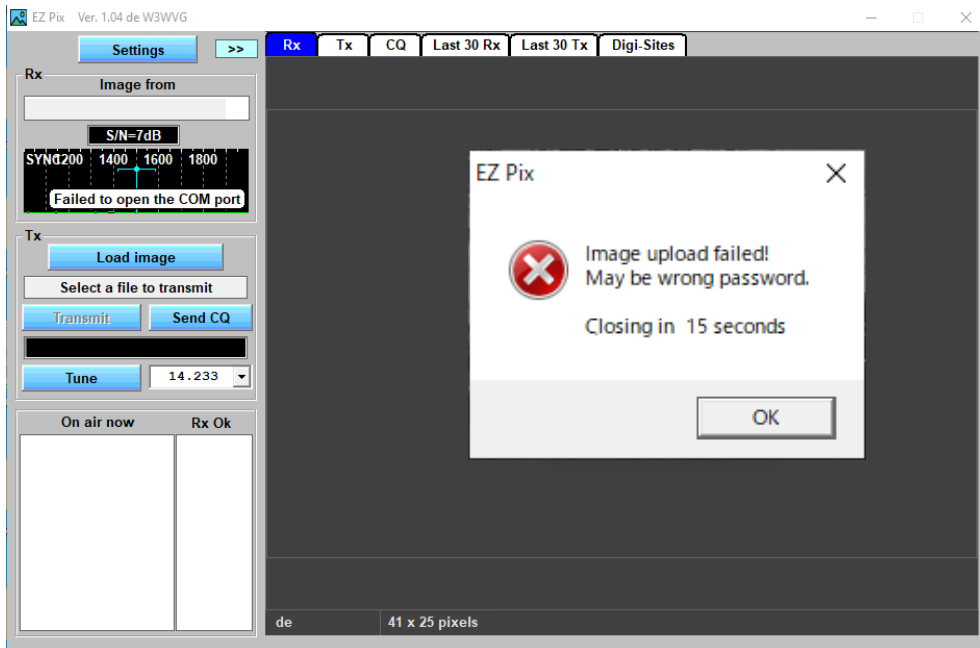
(Fig. AP-16)



(Fig. AP-17)

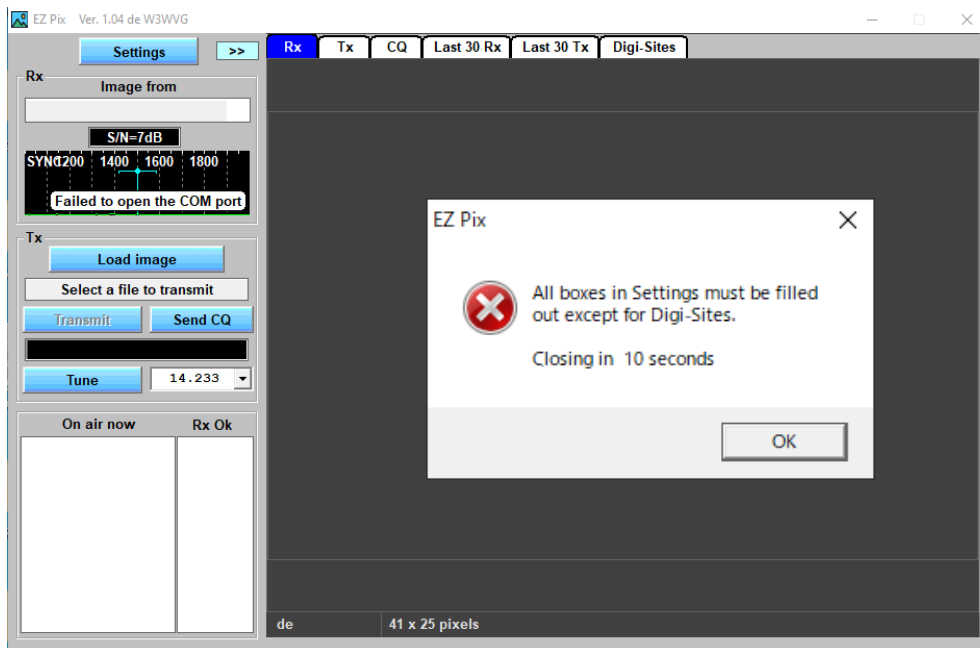


The green progress bar in Fig. AP-17 comes to the right end → Then the screen in Fig. AP-18 pops up → Then a comment is displayed → Then click the "OK" button without waiting for 15 seconds → ※6



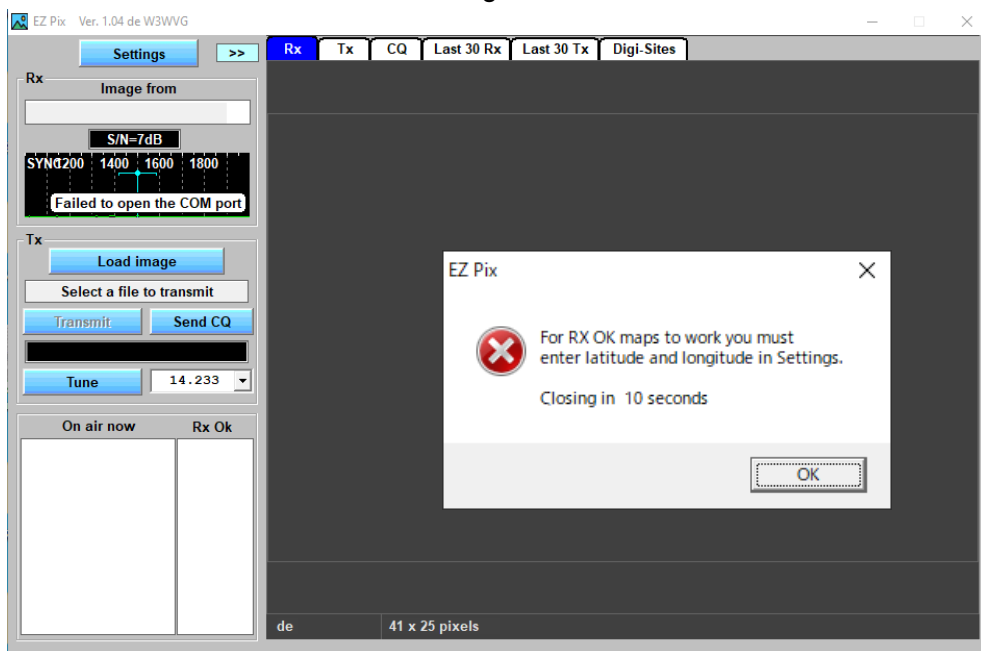
(Fig. AP-18)

※6 → Then the screen changes to Fig. AP-19 → Then a comment pops up → Then click the "OK" button without waiting 10 seconds → ※7



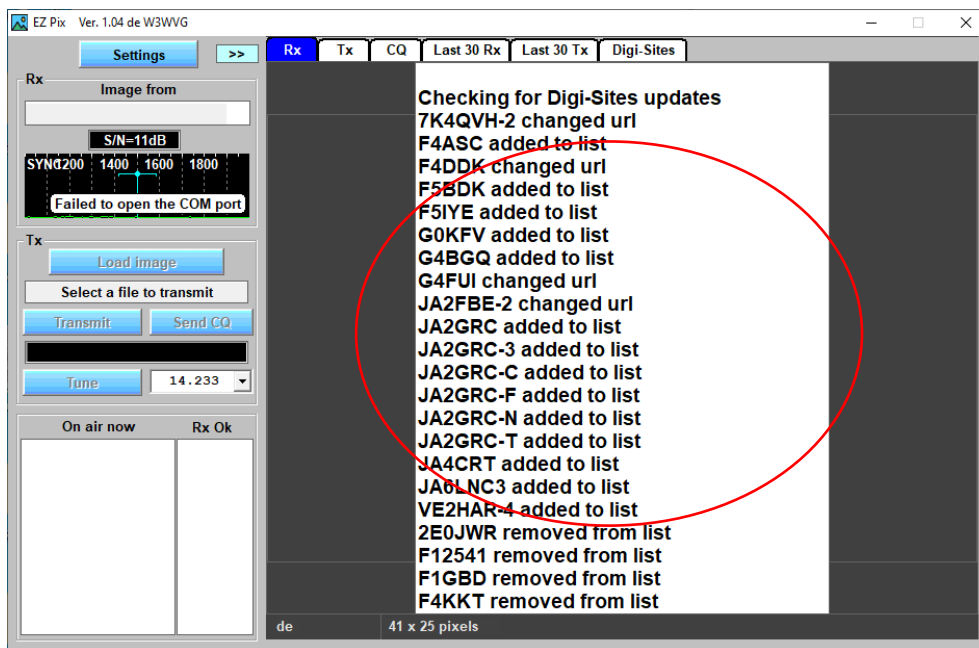
(Fig. AP-19)

※8 → Then the screen changes to Fig. AP-20 → Then a comment pops up → Then click the "OK" button without waiting 10 seconds → ※9



(Fig. AP-20)

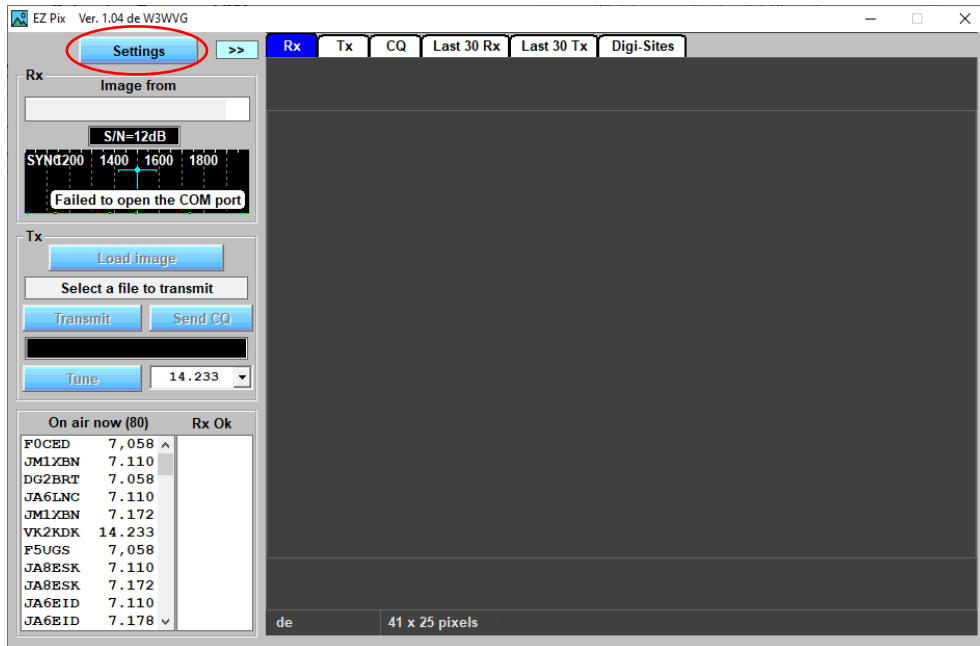
※9 → Then change to Fig. AP-21 screen → Then click where the list is displayed → ※10



(Fig. AP-21)

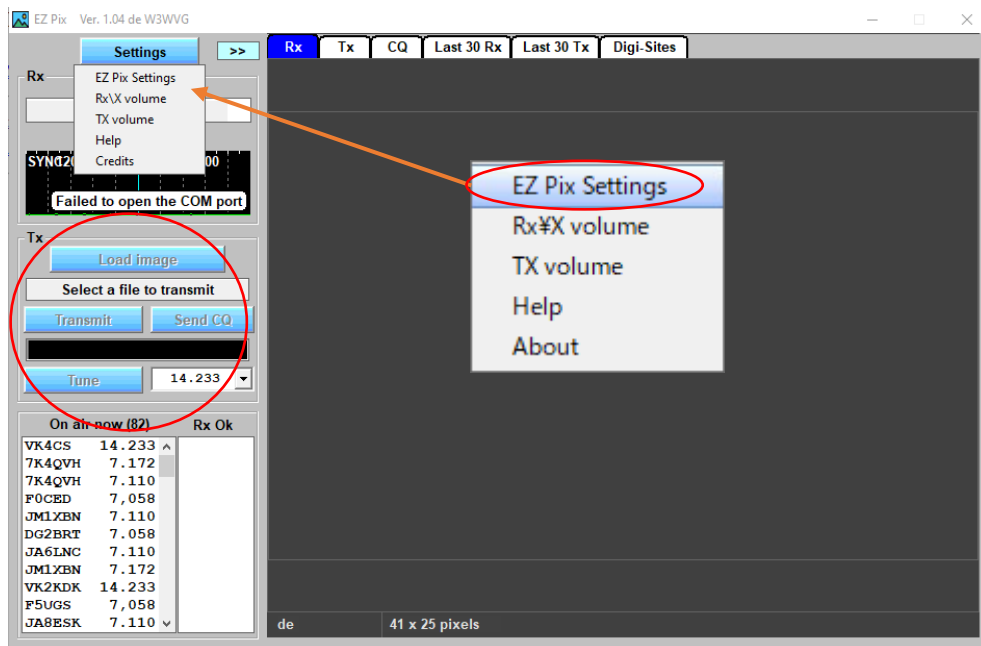
※10 → Then change to the screen shown in Fig. AP-22 → Then click the "Setting"

button on the screen → ※11



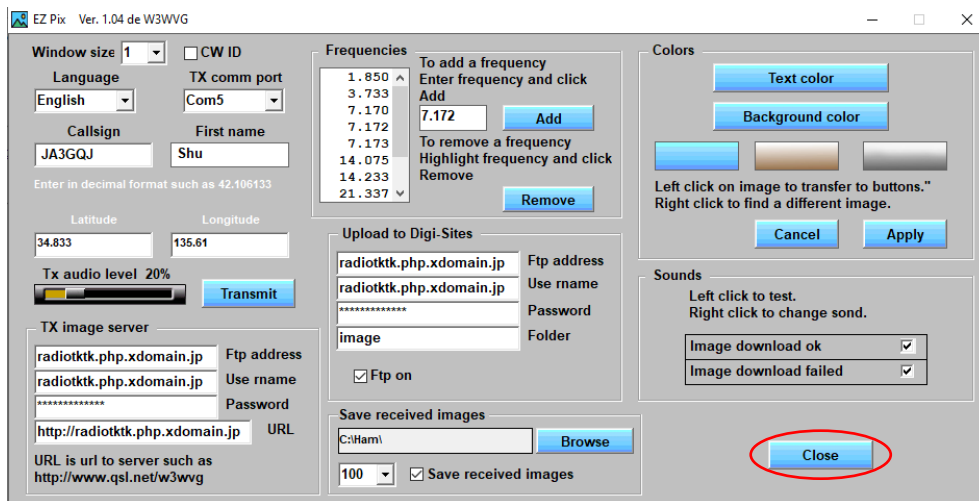
(Fig. AP-22)

※11 → Then change to Fig. AP-23 screen (Text on buttons other than the "Setting" button is faint) → Then click the "Setting" button → Then select "EZ Pix Setting" on the pop-up screen → ※12



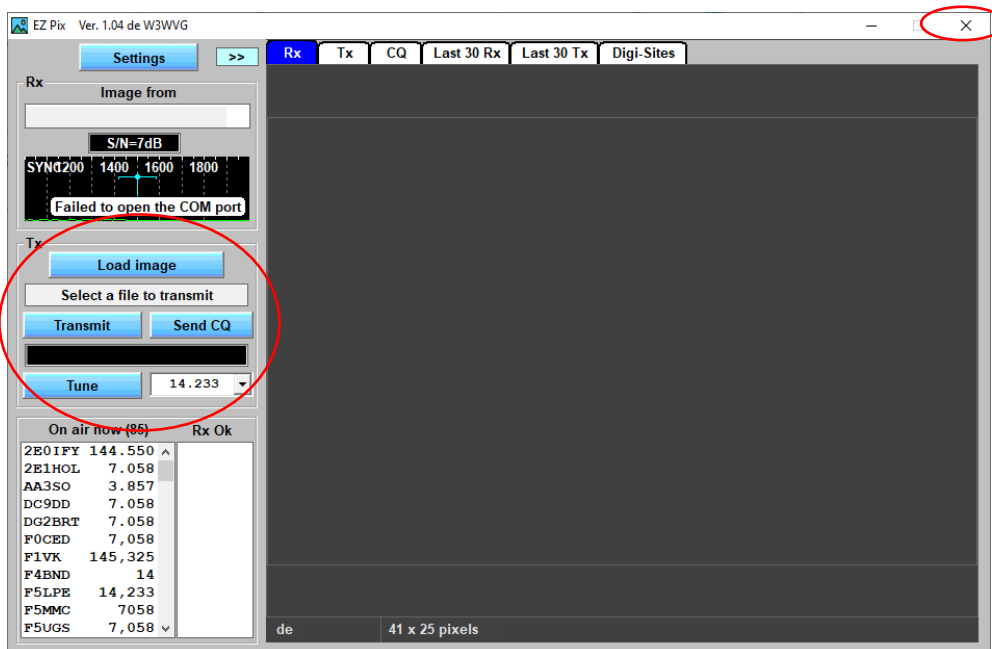
(Fig. AP--23)

※12 → Then "Setting" screen in Fig. AP-24 pops up → Then fill each item → Then click the "Close" button → ※13



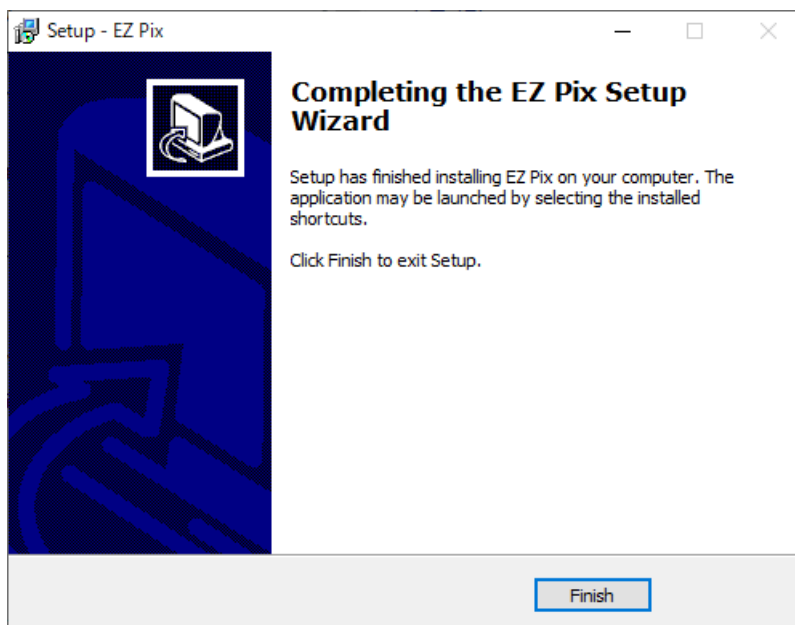
(Fig. AP--24)

※13 → Then change to Fig.-AP-25 screen (You can also clearly see the letters of the buttons other than the "Setting" button) → EZ Pix can already be operated at this point → However, click "X" to close → ※14



(Fig. AP-25)

※14 → The screen of “Completing the EZ Pix Setup Wizard” (Fig. AP-26), which was hidden behind the screen of Fig. AP-25, appears and the installation and setting is completed. → Click “Finish”



(Fig. AP-26)

EZ Pix settings are explained in detail on pages 3 to 7 of the text.