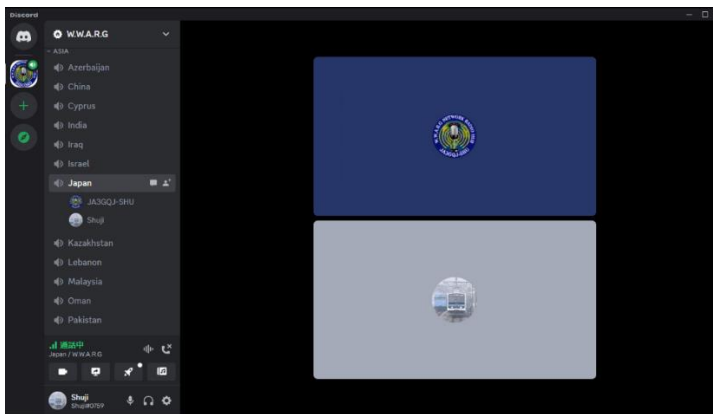


Image exchange QSO experience using Discord



One day, I was introduced to Discord by JF3GOH, who is also an image communication enthusiast. There are a lot of articles on the Internet, and I thought they were mainly used for group conversations. However, he, who is also an image communication enthusiast, asked JA5CU to join the group, and the story of whether image (text) communication software running on Peanut could be used with Discord was raised, and after trial and error As a result, we found a method that can be used smoothly even with Discord. So I made a note of my experience using Discord, which specializes in image (text) communication.

ja3ggj

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A group (server) called W.W.A.R.G.

On Discord, you can freely create something like a group called a server. W.W.A.R.G was created by Martin 2E0EVP who made QSO with May JF3GOH through the Zello. In the server, there are various channels such as "voice channel" where you can talk and "text channel" where you can talk in chat. Only invited participants can enter the server, so outsiders will not enter the server without permission. We image communication enthusiasts are currently enjoying exchanging images while talking on the voice channel "Japan" of the group (server) W.W.A.R.G.

Friend

Fig.1 shows the screen immediately after starting Discord. Each person has a "user name # 4-digit number" ID registered when they registered their account, so we JA5CU (Zenshin#8695), JF3GOH (jf3goh#4212) or myself (Shu#7450) can invite you to friends. Send us a friend request our ID in brackets by "add friends".

Click to open the inbox, confirm that the reply of permission to apply is returned, and if you accept it, you will be able to have a one-on-one conversation.。

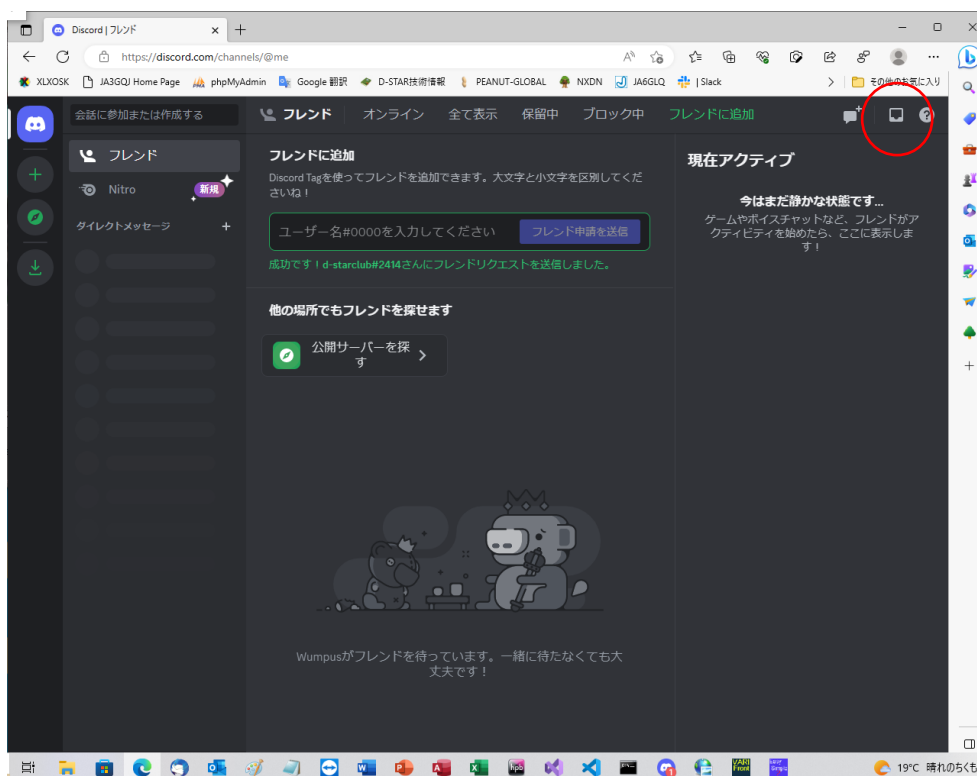


Fig 1

1. Download Discord

Open <https://discord.com/> (Fig. 1-1) → Then click "Download Windows version" → Then Fig. 1-2 is displayed → Then click "Open" → *1

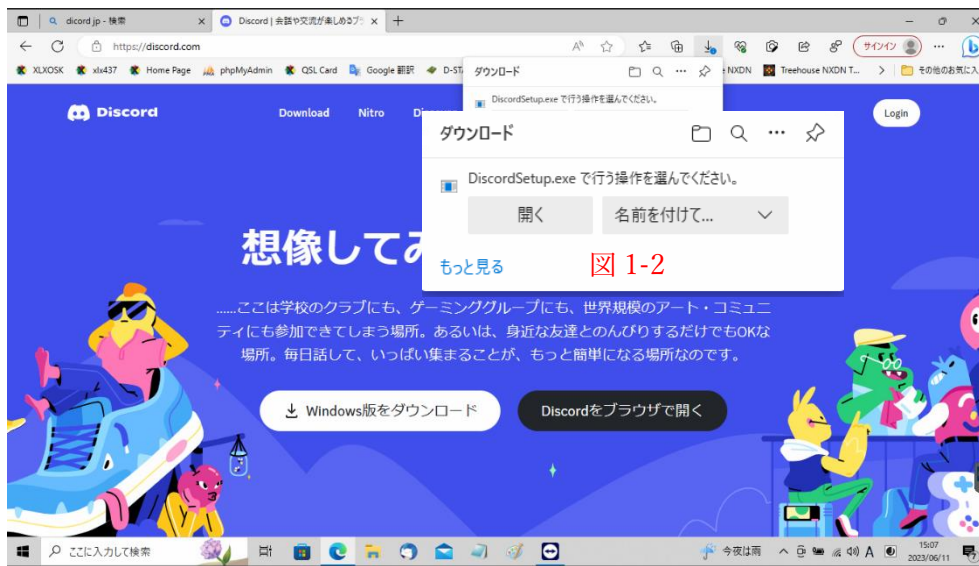


Fig 1-1

*1 → Then a progress bar will be displayed → After that, it will change to Fig. 1-3 → Then a screen with a rotating dog's head will appear in Fig. 1-4, Discord installation will begin → Then account creation screen Fig. 1-5 will appear → * 2

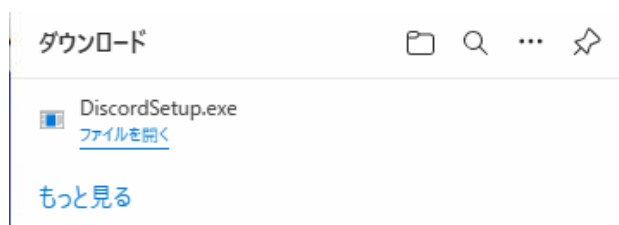


Fig 1-3

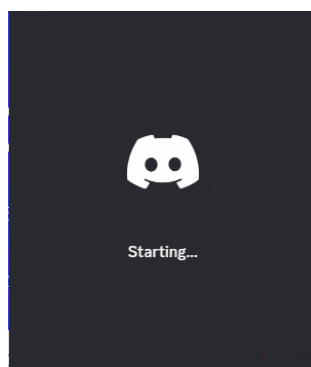


Fig 1-4

*2 → Enter your email address, user name, password, date of birth and click "Yes" → Then click "I am human" in Fig.1-6 that pops up → *3

アカウント作成

メールアドレス

ユーザー名

パスワード

生年月日

年 月 日

Discord からアップデート、豆知識、セール情報のメールを受け取る。オプトアウトはいつでもできます。

はい

既にアカウントをお持ちですか？

登録を行うことで、Discordのサービス利用規約及びプライバシーポリシーに同意したものとみなされます。

Fig 1-5

ちょっと待って！ あなた、本当に人間ですよ？

あなたがロボットではないことを確認させてください。

私は人間です

hCaptcha
プライバシー 条項

Fig 1-6

*3 → Then click "Allow access" 「アクセスを許可する」 in Fig.1-7 that pops up → *4

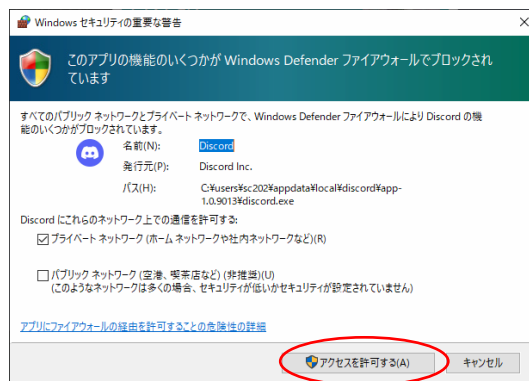


Fig 1-7

*5 → Then select an image according to the explanation in Fig.1-8 that pops up and click "Check" → Then skip Fig.1-9 that pops up by clicking the "X" in the upper right → *6



Fig 1-8



Fig 1-9

*6 → On the pop-up screen that appears to have completed the installation, it is written in white letters on a green belt, "Please check the email you received and follow the instructions to activate it." 「開いたメールを確認し、指示に従ってアカウントを有効にしてください」 (Fig. 1-10) → *7

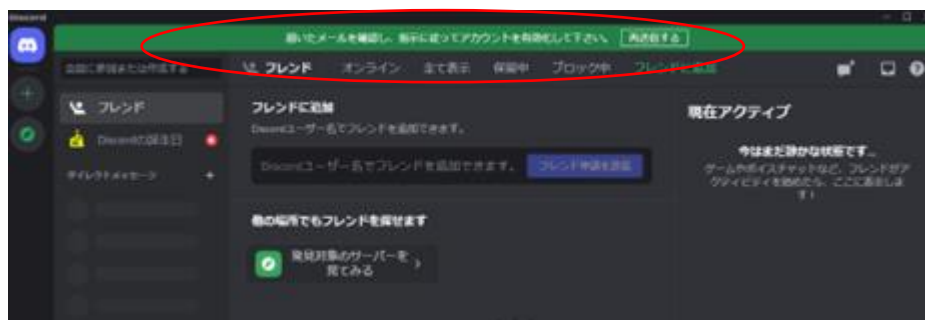


Fig 1-10

*7 → When I opened the email, there was an email with the heading "Please confirm your email address" (Fig.1-11) → The click "Verify Email" → ※8

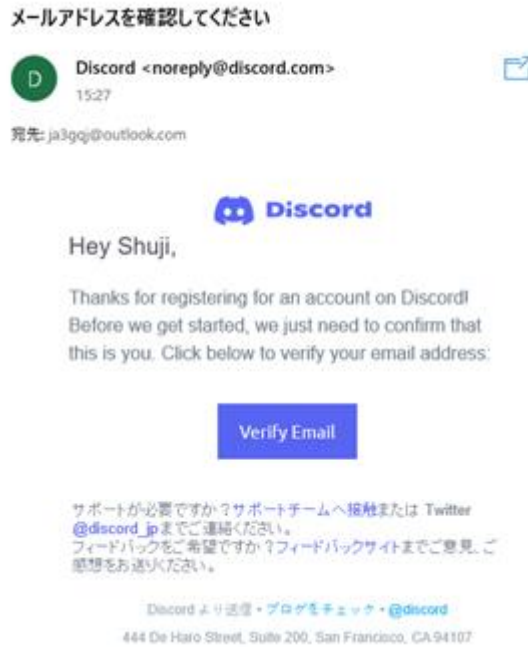


Fig 1-11

*8 → Then click "Verify Email" → Then popup in Fig.1-12 → Then click "Open in Discord" → Then popup in Fig. -13 → Then check mark "Open this kind of link in the app associated with discord.com Always allow" 「discord.com が関連付けられたアプリでこの種のリンクを開くことを常に許可する」 → Then click "Open" → Then Fig.1-14 pops up → *9

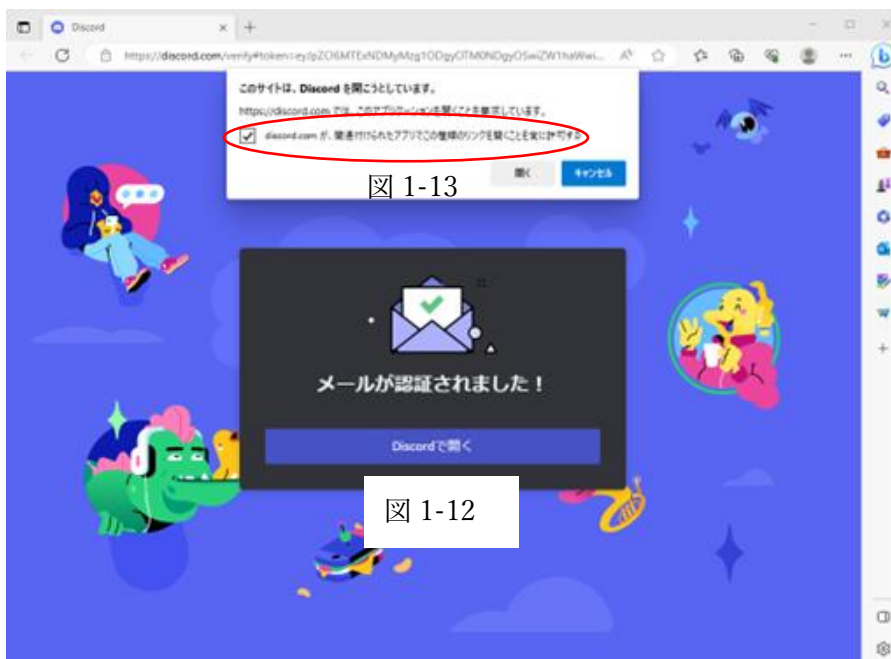




Fig 1-14

*9 → Enter the W.W.A.R.G member ID in "Add to Friends" 「フレンドに追加」 and click "Send Friend Request" 「フレンド申請を送信」 (Fig. 1-15) → *10





Fig 1-15

*10 → The screen changes written a small message that says "Successfully sent a friend request to that person." 「成功です誰それさんにフレンドリクエストを送信しました。」 (Fig.1-16). → *11



Fig 1-16

*11 → Click  to open the inbox (Fig. 1-17) → Click  on "Add an avatar and update your profile" 「アバターを追加してプロフィールをアップデートしましょう」. → *12

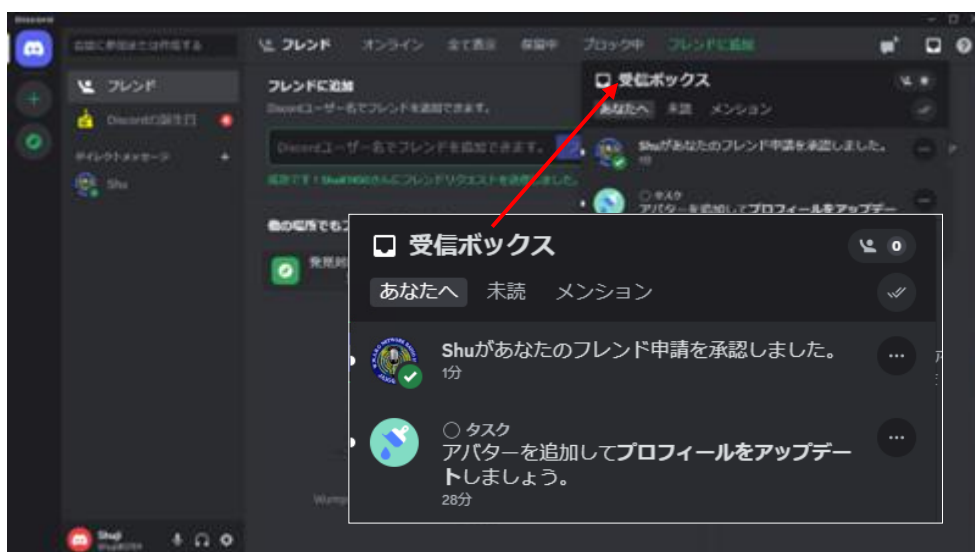


Fig 1-17


*12 → Click the pen icon  on the pop-up screen (Fig. 1-18) → *13



Fig 1-18

*13 → Click "Change Avatar" 「アバターを変更」 on the pop-up screen (Fig. 1-19) → *14

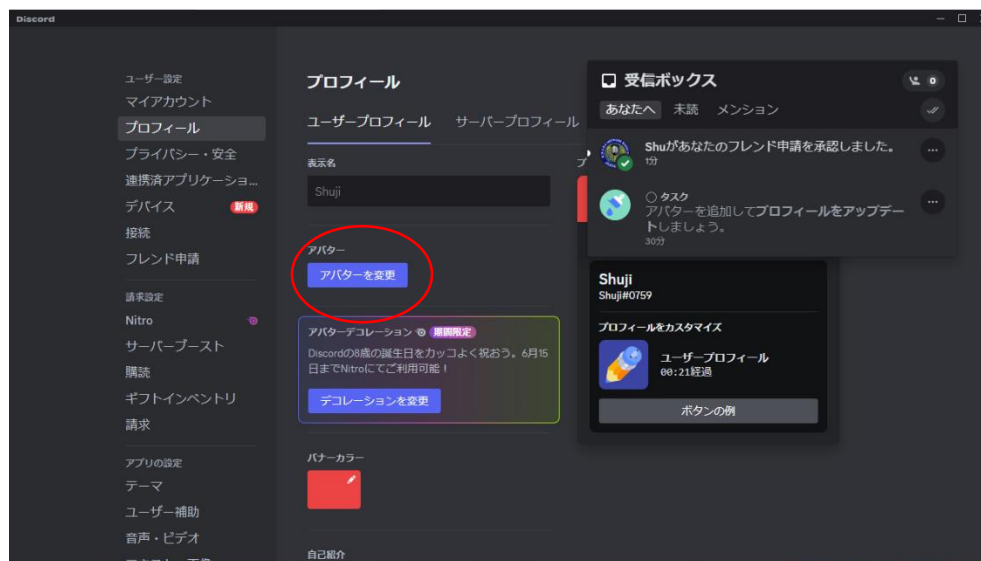


Fig 1-19

*14 → Click "Upload Image" 「」 on the pop-up screen (Fig. 1-20) → *15



Fig 1-20

*15 → Then the image folder opens (Fig. 1-21) → Then select the image on the popup screen → Then click the "Open" button. → *16

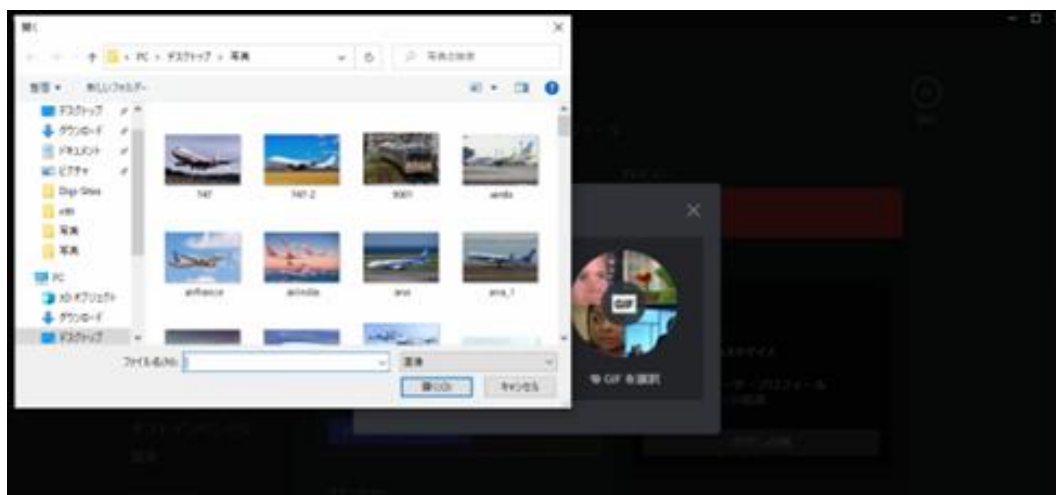


Fig 1-21

*16 → Then the image is pasted on the "Edit Image" 「画像を編集」 screen (Fig. 1-22). → Then edit the selection range of the image with the slide bar. → Then click "Apply" 「適用」. → *17



Fig 1-22

*17 → Then the screen changes (Fig. 1-23) → Then click "Save changes" 「変更を保存する」 at the bottom right → *18



Fig 1-23


*18 → Then the screen changes (Fig. 1-24) → Then click X ESC  to close the screen
→ *19



Fig 1-24

*19 → Then the screen shown in Fig.1-25 appears → Then the icon of the member who invited your station is created in the list on the left of the screen → *20



Fig 1-25

By this point, I was able to communicate one-on-one with the other station to which I applied for a friend. Next you need to join the members of W.W.A.R.G.

2. Join the members of W.W.A.R.G

Have W.W.A.R.G members who are now able to communicate one-on-one click "Invite friends" 「友達を招待」 on the screen in Fig.2-1. ※①

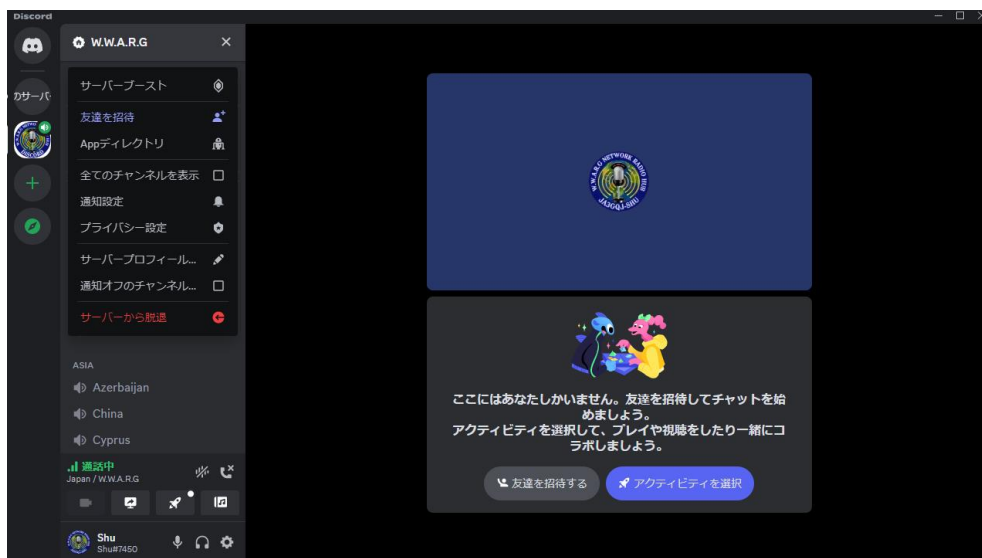


Fig 2-1

※① → Then the W.W.A.R.G members' fig.2-2 pops up. → Then W.W.A.R.G members click "Invite" 「招待」. → ※②

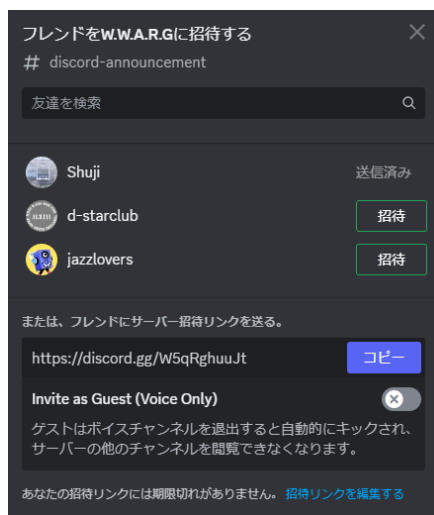


Fig 2-2


*② → Then click  on the upper right corner of your screen. → Then open your inbox.
 → Then click "Join" 「参加」 If you received an email "You have been invited to join the server" (Fig. 2-3). → ※③



Fig 2-3

③→ Then the Discord announcement (Fig. 2-4) is displayed, and the channel list is displayed on the left side of the screen. → Then click "Japan" in it. → ※④

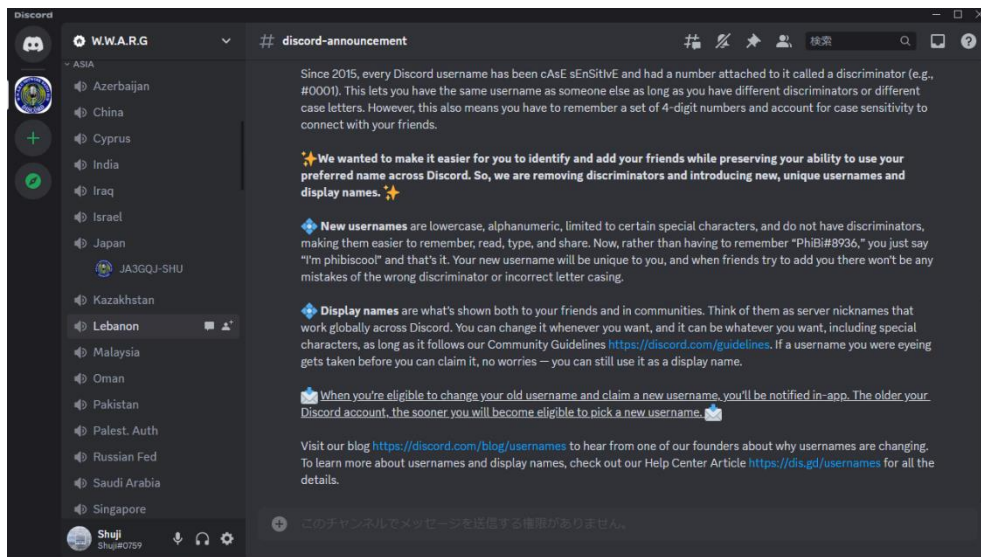


Fig 2-4

* ④ → Then the screen will change and the image set in the avatar (Fig. 2-5) will be displayed. → Now you know that you have joined the group. → On Fig.2-5, by check on "Do not display again" 「今後表示しない」, I removed "Are you looking for something to do?" 「何かやることをお探しですか？」. Fig.2-6

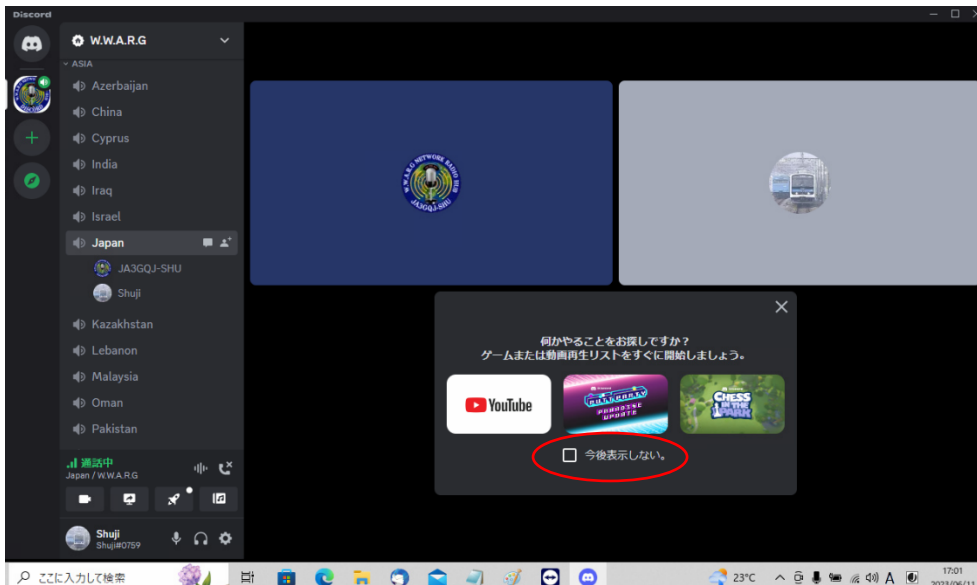


図 2-5

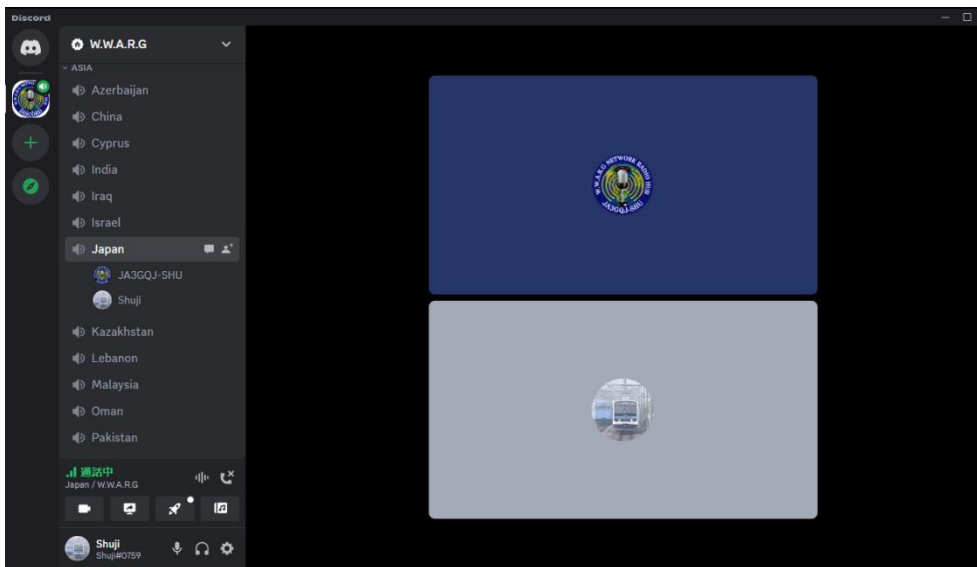





Fig 2-6

After a while, you may receive an email from the server creator on Discord.

For logos created with avatars, it is better to contact the author and use the logo provided by the author

3. Settings for image communication

Click  to the right of "通話中" at the bottom left of the screen in Fig.3-1 → Turn off the "Noise Control" button on the opened screen (change from green  to gray ) →


Click other  screen then turn off the screen → *a



Fig 3-1

*a → Click the gear icon on the far right of the microphone, headphone, and gear icons at the bottom left of the screen. → The screen shown in Fig. 3-2 pops up. → Scroll the items on the left. → Select "Audio/Video" Then find and click. → *b

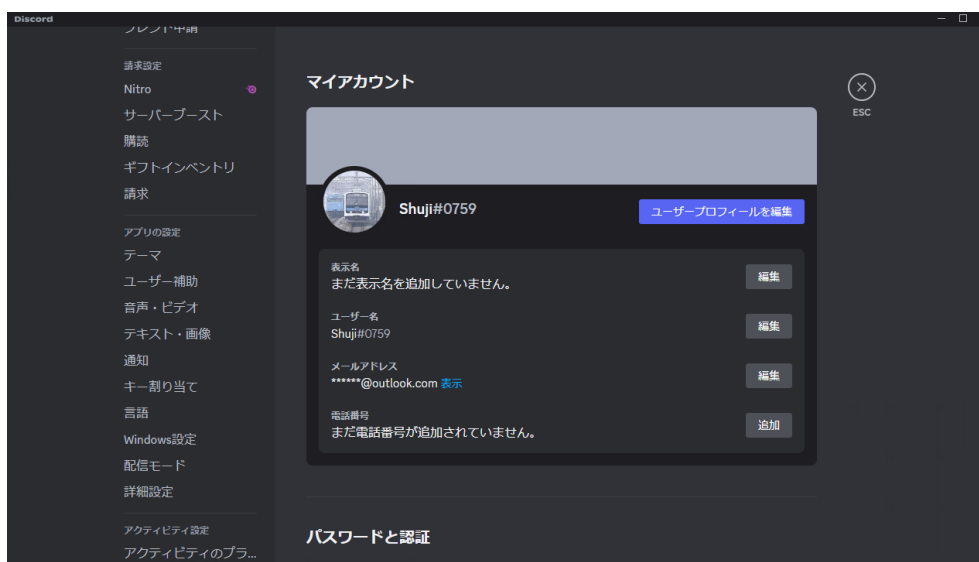


Fig 3-2

*b → Change to the screen shown in Fig.3-3. → This screen is my setting screen.



Fig 3-3


Audio settings

For the input device and output device, refer to APPENDIX-1 "Checking the Windows 10 sound device" at the end of the book and I set the device used on my computer. Use the slide bar to determine the optimum input/output value. If you click "Confirmed...", the text will change to "Test in progress..." and you can adjust the volume of the microphone by yourself while looking at the level meter. The other station cannot hear you. When the adjustment is completed, click "Testing..." to return to the "Confirmed..." display.

Sound board : I set the slide bar on the right side.


Input mode : Select audio output.

Input sensitivity : It seems to be adjusting the so-called VOX sensitivity. I set it to about 40% of the entire slide bar. If the right switch is on (green, turn it off (gray).

If you scroll the screen on the right side of Fig.3-3, there are many setting items under the video settings, but skip them all → Click  to close the screen → Setting completed → Click ``X" to close the screen → However, Discord resides on your computer.

4. Stop Discord

4-1 Stop while the computer is running

Click on  at the bottom right of the computer desktop (Fig. 4-1). → There is a small

Discord icon ①. → Right click on it → A list pops up.. → Click "Quit Discord" on the list → Discord stops.

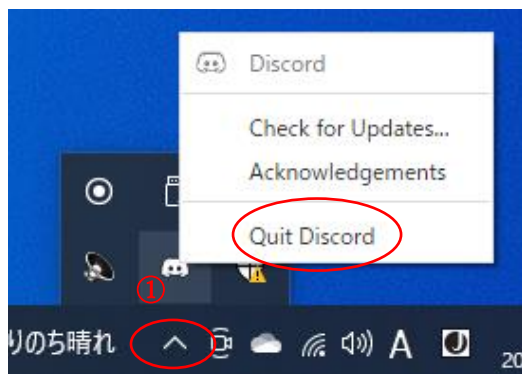


Fig.4 – 1

4-2 Shut down your computer and stop

5. Launching Discord

5-1 When you start your computer

Automatically wake up and resident

5-2 When the computer is running

Click the icon on the desktop to restart your computer after it has stopped running.

6. Conversation with W.W.A.R.G members

Discord is a two-way simultaneous call system, just like a phone.

Discord is running → Then click the microphone icon on the left side of the screen → Then find "Japan" from the list and click → Fig.6-1 shows members already connected → *1

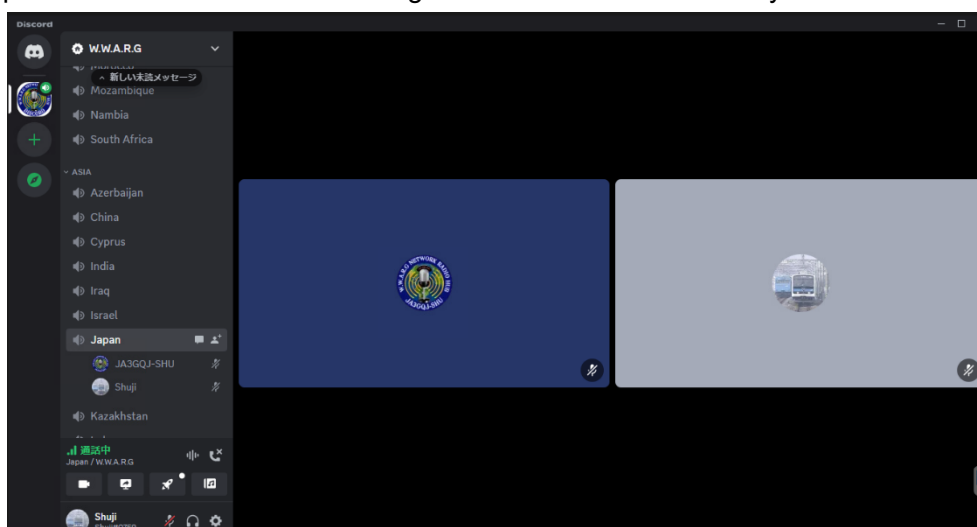




Fig 6-1

*1 → Click the turned off microphone icon  to turn on the microphone 
 → *2

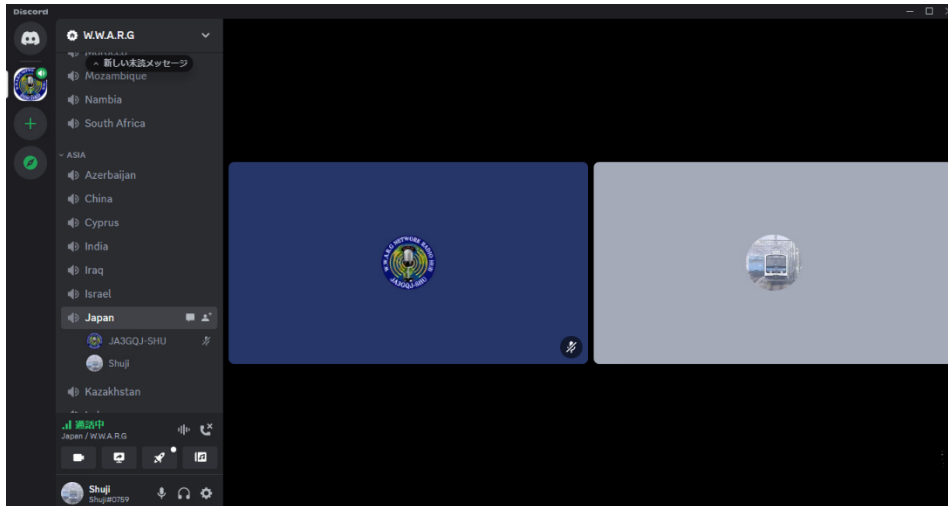


Fig 6-2

*2 → Speak to the members. → The members turn on the microphones and the conversation begins. → The large icon of the person you are talking to is surrounded by a green border (Fig. 6-3). → Since it is a simultaneous call system, the icons may be surrounded by a border at the same time.

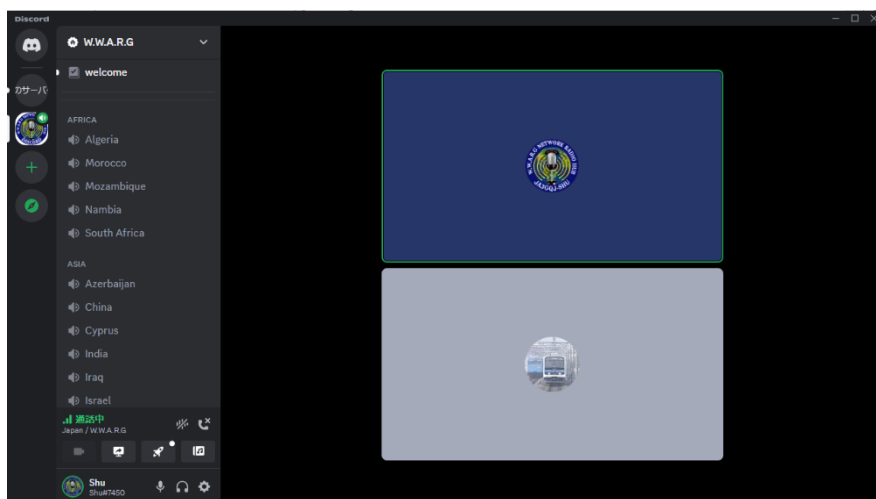


Fig 6-3

Discord seems to have a policy of turning off the mic when not participating in a conversation. You can also click the headphone icon to turn off the speaker when you are not participating in the conversation and not listening to it or when you are away.

7. Image communication with W.W.A.R.G Japan channel members

Image controller Easy Simple is the key to image communication.

Image controller Easy Simple is software developed by Kazu JQ1HDR , and as shown in Table 1, it is important to carefully read the explanation on Kazu's homepage, as it is the key to image communication that controls multiple image communication software.

<http://jq1hdr.world.coocan.jp/Instruction3/index.html>



Setting screen



Received image display screen

Image Controller Easy Simpleと組み合わせて画像通信に使うソフト



EZ Pix, MMSSTV and YONIQU can be operated independently in combination with Discord.

FTP server is also required

See separate volume "FTP server required for image communication."

It would be better to have DigiSites

See separate volume "Digi Site usage experience"

7-1 Image (text) communication software and mode used in Discord

In addition to making voice calls, Discord allows enthusiasts who have experience operating image (text) communication with Internet conversation software such as Peanut to exercise their amateur spirit and operate image exchanges in the modes shown in Table 1. I found

ソフト	モード
Vari Image Front	rtty-L, msfk-U, bpsk, GMSK
EZ Pix	GMSK (FSK-W)
MMSSTV・YONIQ	MMSSTV・YONIQ
JTDX／WSJTX	FT8 / msfk-144, Q65
JS8CALL	JS8CALL
Image controller Easy Simple	Vari Image Front、 MMSSTV・YONIQ、 JTDX／WSJTX、 JS8CALL をコントロールする

Table- 1

Fig.7-1 is an Imagination diagram of his FT8 image (character) communication of JTDX using "Discord", "image controller Easy Simple", and "DigiSites". You can also try replacing JTDX with Vari Image Front, MMSSTV/YONIQ, JS8CALL and EZ Pix. That's why Peanut supports not only voice communication but also many of these image (text) communication software.

Imagination diagram of image exchange

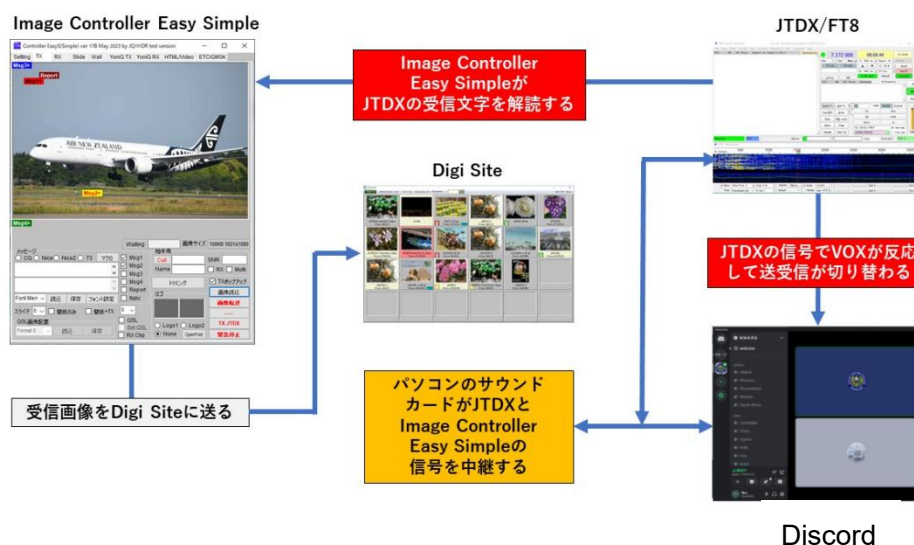


Fig 7- 1

7-2 Sound card input/output processing of image signals

Image exchange by Discord is different from on-air by transceiver, and Discord and communication software operate by sharing the sound card of the personal computer. Also, even if signals for image and signals for audio are sent at the same time, the image exchange will not be affected I think.

Discord does not require switching between audio and image signals also .

7-3 Receiving images in combination with Image Controller Easy Simple

Start the software in Table 1. → Instead of audio signals, the running software waits for image (character) signals that match the mode of the transmitting station. → An incoming tone sounds. → The image is displayed on the RX tag screen of Image Controller Easy Simple and is also uploaded to Digi-Site.

Fig.7-2 is a screenshot of the desktop with Discord and Image Controller Easy Simple, Vari image front, MMSSTV Yoniq and JTDX for FT8 running at the same time. By simultaneously running the software in this way, the image corresponding to the mode of the transmitting station can be automatically watched.

Since there are many software running at the same time, even if Discord is minimized and not displayed on the desktop, image reception will not be affected.

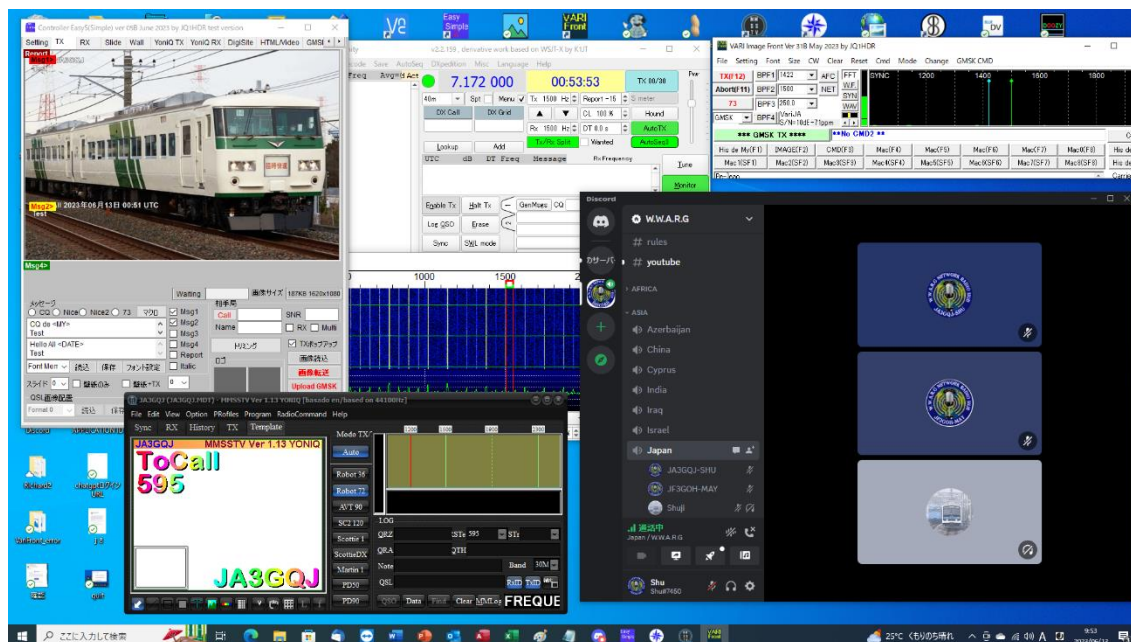


Fig 7-2

Receiving images with EZPix alone

Launch EZPix. → Wait for an image (character) signal. → An incoming tone sounds.

→ The image is displayed on the screen of the "Receive" tag. The details of EZPix are summarized in the separate volume "Experience using EZPix". Fig.-3 is a desktop screenshot with Discord and EZPix run.

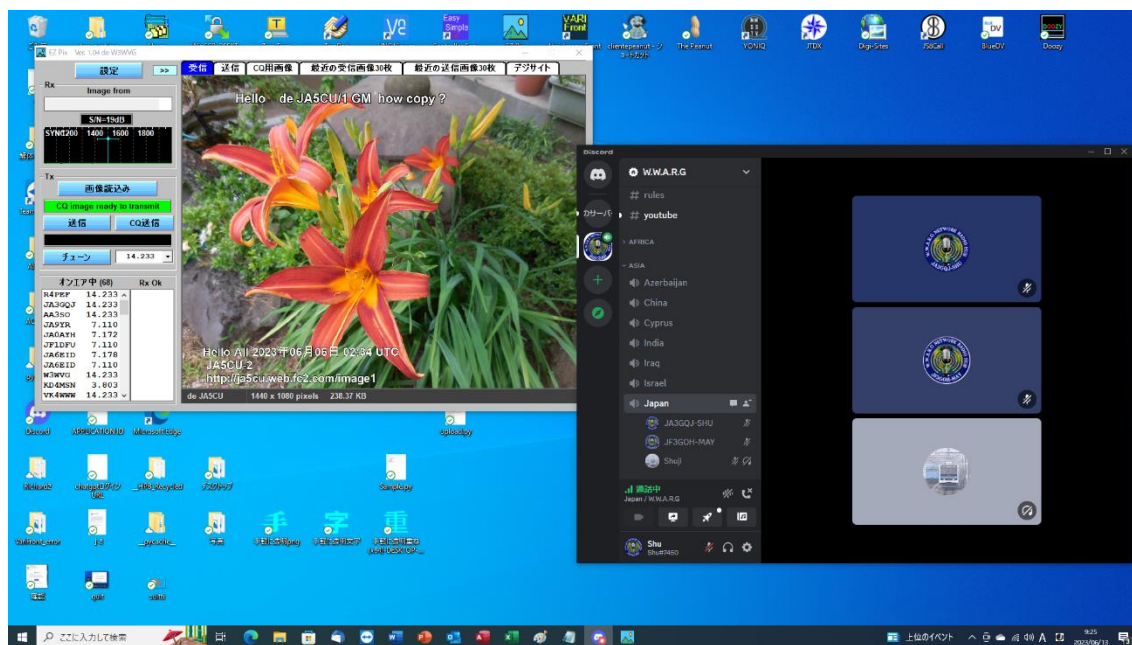


Fig 7-3

8. Send image

The following is a form in which image (text) communication software and Discord are operated independently, but in the same way as receiving, you can also run all image (text) communication software at the same time and select software at the time of transmission. be. Discord's VOX function is very good, so the transmission operation is very easy.

8-1 Combination with Vari image Front (mode is GMSK or msfk-U)

Start Image Controller Easy Simple Vari image Front. → Select the "TX" tag of Image Controller Easy Simple. → Click the "Load image" button. → Double-click the image to be sent in the opened image storage folder. → The image is past to the screen of the "TX" tag. → Use macros to insert characters into the image. → Click the "Transfer image" button → The sent image will be displayed enlarged to indicate that the image has been transferred to the server. → Click the function key corresponding to the mode of "Vari image Front". → Start sending. → The transmission ends automatically. → The call sign of the receiving station is displayed in "On Air & Rx List" of Image Controller Easy Simple → Receiving standby.

8-2 Combination with JTDX (mode FT8)

Start Image Controller Easy Simple and JTDX. → Then select the "TX" tag of Image Controller Easy Simple. → Then click the "Load image" button. → Then double-click the image to be sent in the opened image storage folder. → Then the image is past to the "TX" tag screen → Use macros to insert text into the image. → Then click the "Transfer image" button → Then the sent image will be displayed enlarged to indicate that the image has been transferred to the server. → Then click the "Enable Tx" button on JTDX. → Then start sending when the sending time comes. → Then the transmission ends automatically. → Then the call sign of the receiving station is displayed in "On Air & Rx List" of Image Controller Easy Simple. → Then receiving standby.

8-3 Combination with MMSSTV and YONIQ

Start Image Controller Easy Simple and MMSSTV/YONIQ. → Then select the "Yoniq Tx" tag of Image Controller Easy Simple. → Click the "Load image" button. → Then double-click the image to be sent in the opened image storage folder. → Then the image is past to the screen of the "Yoniq Tx" tag. → Then use a macro to insert text into the image. → Click "Create image". → Then click "to Yoniq". → Then the image will be pasted on the MMSSTV/YONIQ TX tag screen. → Then click the "TX" button on MMSSTV/YONIQ. → Then start sending. → End of transmission. → Then receiving standby.

8-4 Sending EZPix (mode GMSK) images

For images only, just EZPix and Discord are OK. When adding text to images, it is good to combine with "Image Controller Easy Simple", so refer to Kazu JQ1HDR's homepage. The details of EZPix are summarized in the separate volume "Experience using EZPix".

9. Conclusion

Discord seems to have a lot of features, but I only use the features necessary for conversation and image exchange.

As of June 13, 2023

APPENDIX-1

Check the Windows 10 sound device

Right-click the speaker icon (Fig.S-1) in the lower right corner of the desktop → ※1

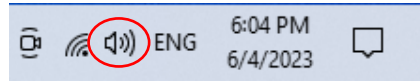


Fig.S-1

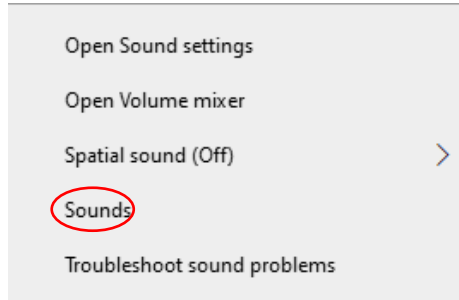


Fig. S-2

※1 → Click "Sound " on the pop-up screen (Fig. S-2) → Then the screen Fig. S-3 will be displayed → Then select the "Playback" tag → Then microphone device will be displayed (Fig. S-4) (The microphone icon with a check mark is the device currently in use) → Then right-click on the icon → Then select "Properties" on the pop-up screen (Fig. S-5) → Then the microphone properties screen (Fig. S-6) is pop up → Then select the "Level" tag on the speaker properties screen (Fig. S-7) → Then adjust the volume with the slide bar → Then "OK" button to go back to → ※2

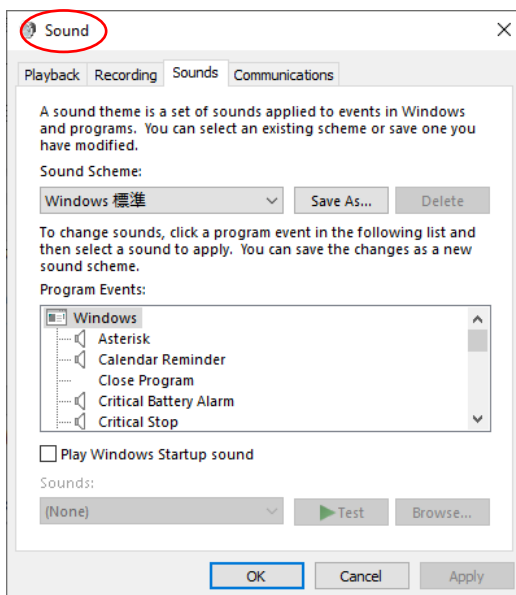


Fig. S-3

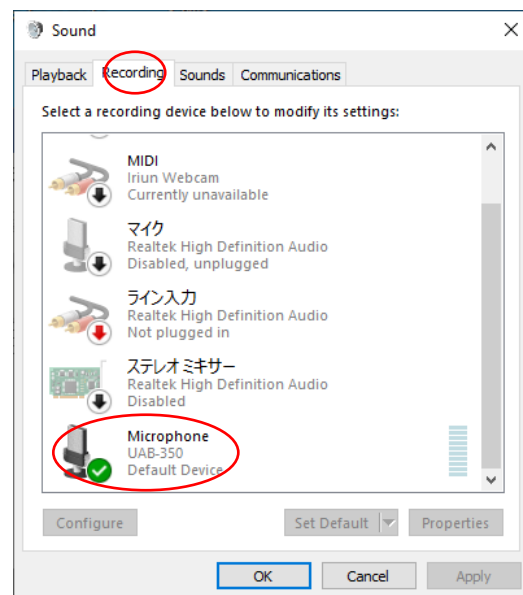


Fig. S-4

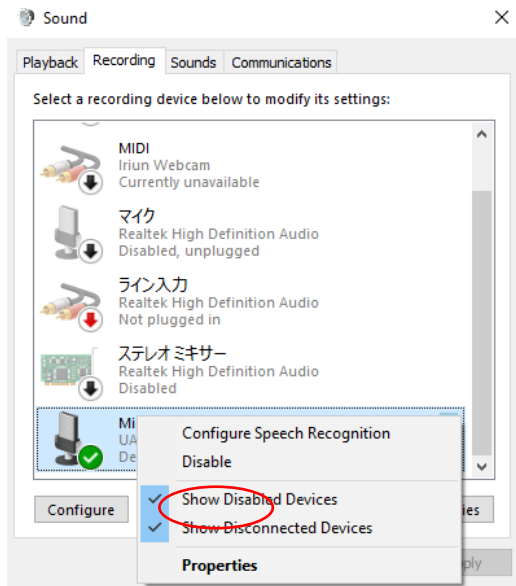


Fig.S-5

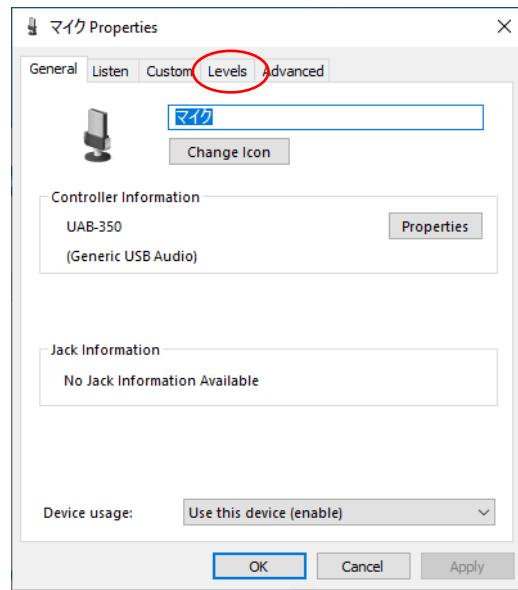


Fig.S-6

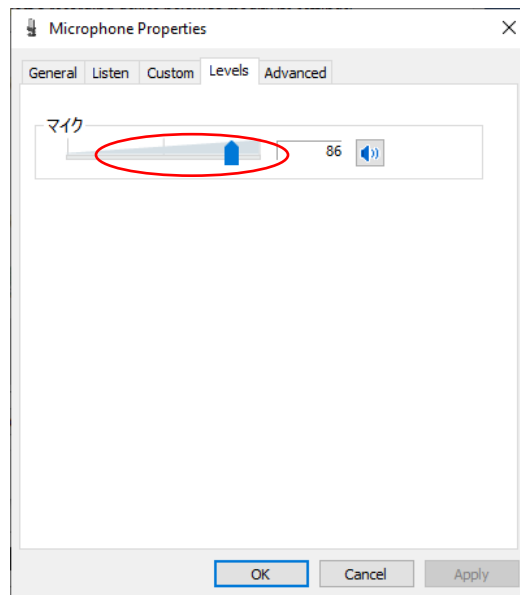


Fig.S-7

※2 → Then select the "Play back" tag → Then the speaker device is displayed (Fig. S-8)(The microphone icon with a check mark is the device currently in use) → Then right-click the icon → Then "Properties" screen is popup (Fig.S-9) → Then select "Properties" on the popup screen (Fig.S-10) → ※3

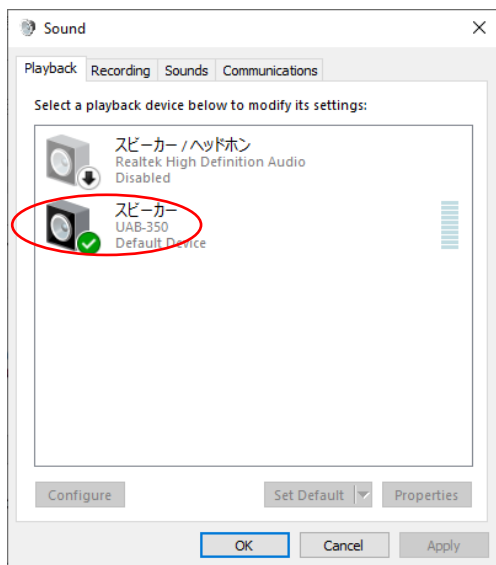


Fig.S-8

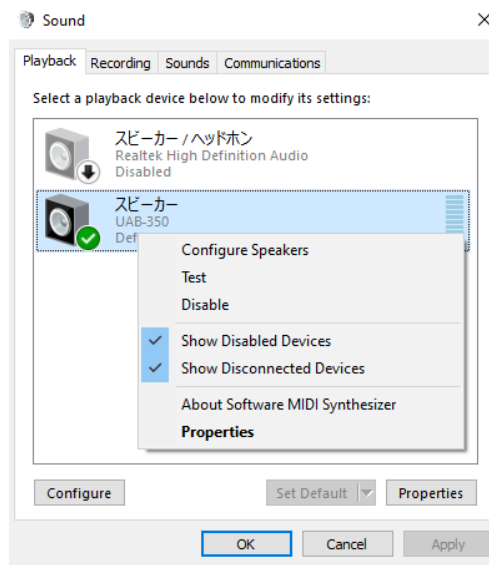


Fig.S-9

※3 → Then select the "Level" tag on the "Microphone properties" screen → Then "Fig. S-11" opens → Then adjust the gain with the slide bar → Then click on the "OK" button to return the screen in Fig. S-7 → Then click on the "OK" button to finish checking the sound device

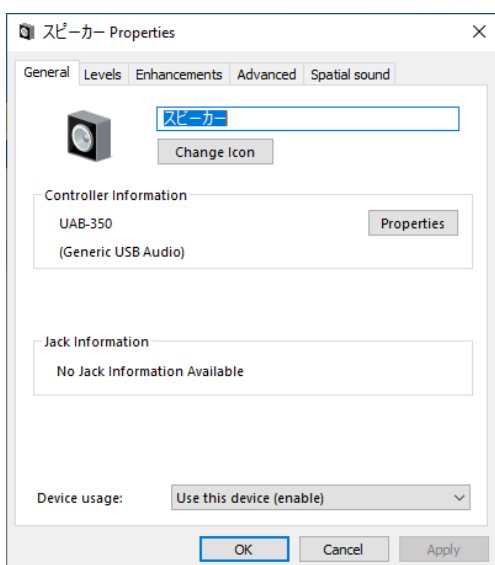


Fig.S-10

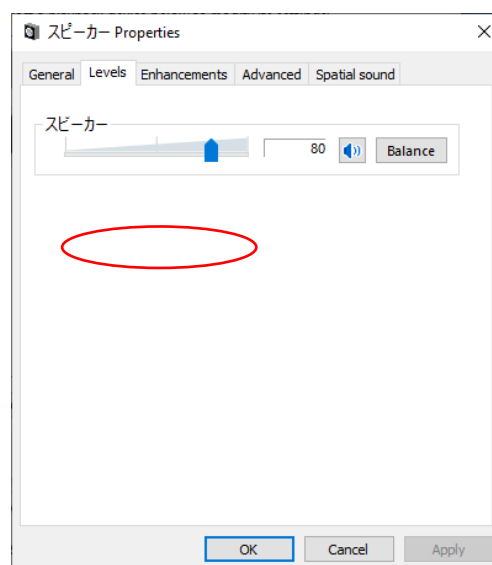


Fig.S-11

In addition, if it is only the volume of the speaker, you can adjust it with the slide bar that pops up by left-clicking the speaker icon at the bottom right of the desktop.



Fig.S-10

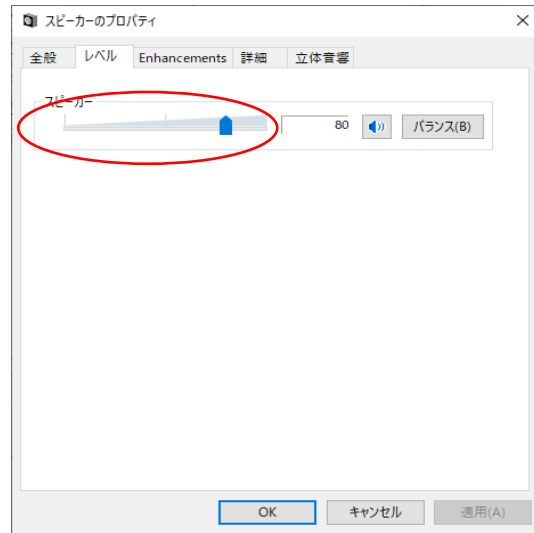


Fig.S-11

In addition, if it is only the volume of the speaker, you can adjust it with the slide bar that pops up by left-clicking the speaker icon at the bottom right of the desktop.

