Yaesu_991A Installation guide Lines.

This software will only work, when all USB drivers are installed on the attached computer.
The software is tested/build on Windows 11, but it should also work with Windows 10.

USB driver software is available for download on the Yaesu website, using the link below,
https://www.yaesu.com/downloadFile.cfm?FileID=17302&FileCatID=42&FileName=CP210x%5FUniversal%5FWindows%5FDriver.zip&FileContentType=application%2Fx%2Dzip%2Dcompressed

Installation details for the USB driver is available on the Yaesu website, using the link below,
https://www.yaesu.com/downloadFile.cfm?FileID=17402&FileCatID=42&FileName=USB%5FDriver%5FInstallation%5FManual%5FENG%5F2205%2DE.pdf&FileContentType=application%2Fpdf

After proper driver installation, we should have working
communication and audio, between the PC and the Transceiver.
To finalize/verify you can open the windows settings and open device's
and both Audio & Comports channels should be visible.

(more details and instructions available on the last page in this document)

The correct USB drivers are required/mandatory to enable communication
between the PC and the Transceiver.

To make the connection between the Yaesu Transceiver / Computer a USB cable is required.

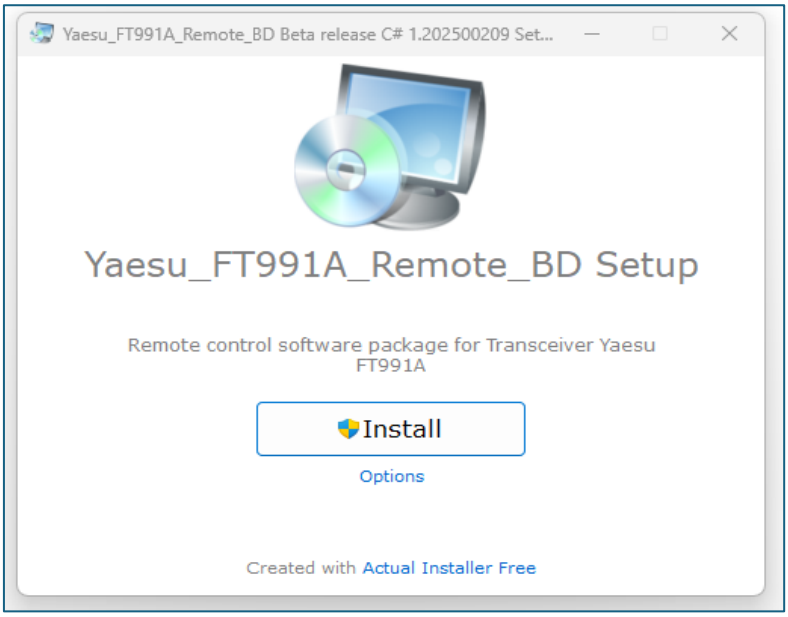
Search on internet to see where you could order this cable.
I got the cable from RT systems, USB-A to USB-B 6-Ft cable (Gold plated connections)

Install remote software.

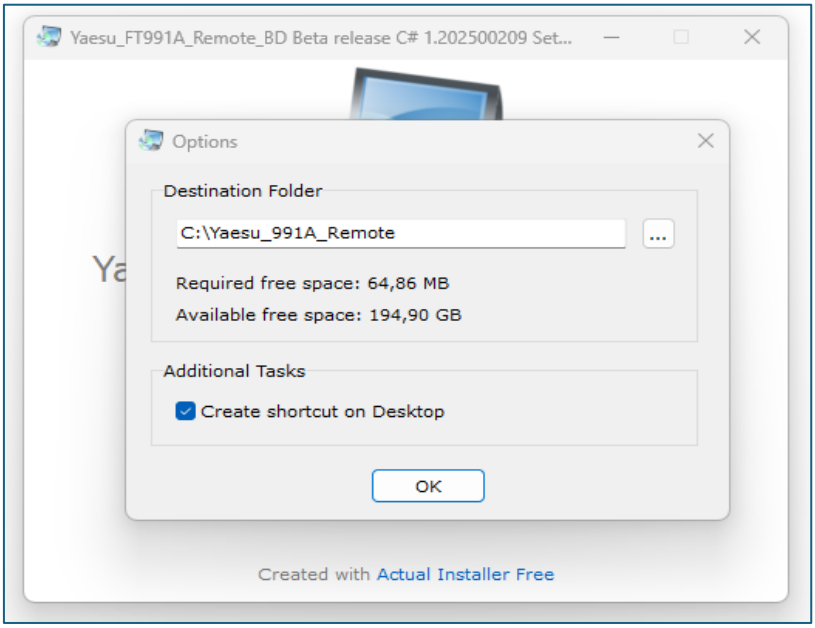
Yaesu_FT991A_Remote_1.2025MMDD_Install.exe

How to install the software on the windows computer, that is connected to the Transceiver.
Copy the software “Yaesu_FT991A_Remote_1.2025MMDD_Install.exe” somewhere on the PC.

When activated the installation file the window below will open.



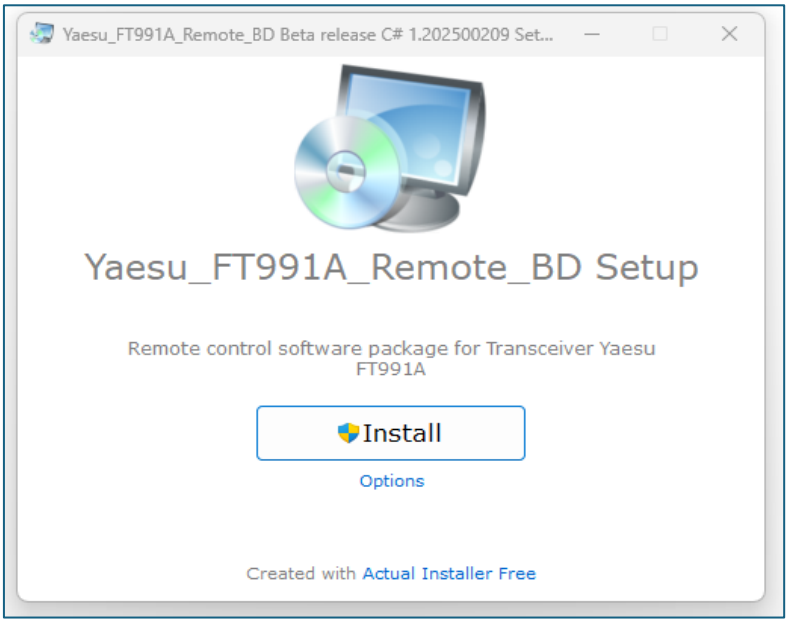
If you want to make changes to the default installation select the options first, when not making changes to the default setup, skip this section and move to the next page.



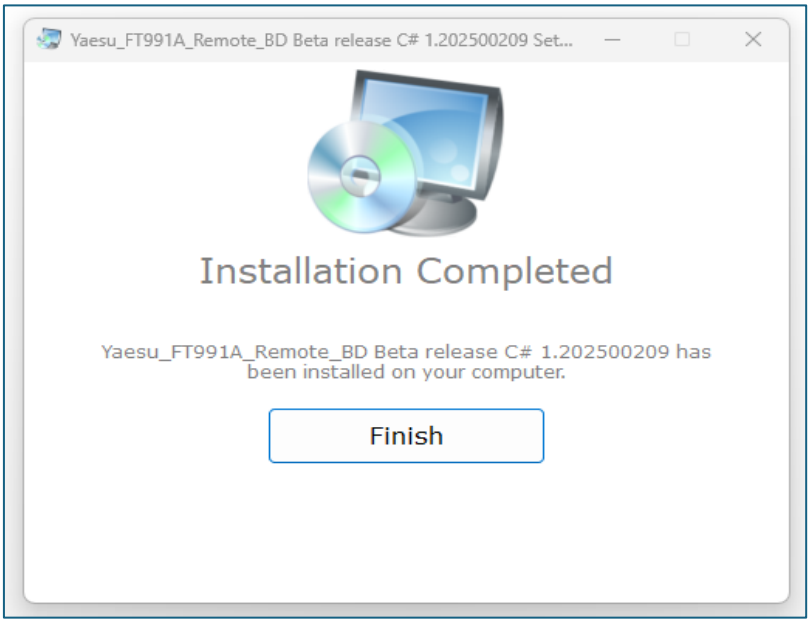
By default the software is installed inside the directory “**C:\Yaesu_991A_Remote**”.
When the default options are used, the software will install at least 6 Icon’s on the desktop.
Of course you could disable the desktop Icon’s and select any other installation directory.

Double click “OK”, or select “OK” and then press the return key on your keyboard.

For normal **(recommended full)** installation double click "**Install**" to start installation.



Windows may stop and not start installation immediately, and warn you for using external software.
This is standard windows behavior to prevent you from installing unknown software.



Then double click the "**Finish**" button and all required software is installed on the PC.

The software includes 6 program's, to be used for local and remote operation.
To keep it simple, all software apps are installed in a single directory.

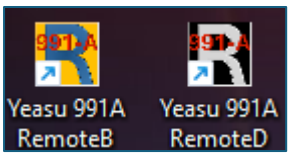
After the installation (when selected) you will find the 6 icon's on your desktop.

But what program should U use for Local or Remote operation?

On the next pages you can read a simple description for each Icon/Program.

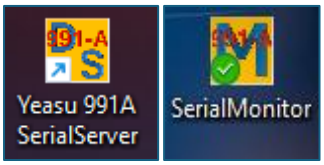
Some details about the Icons & Software programs,

What is the purpose of each Icon & Program!



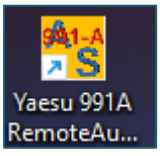
The above Icons will start the Main program.
Yaesu 991A RemoteB starts the main window in “Bright” mode.
Yaesu 991A RemoteD starts the main window in “Dark” mode.
This main application is used on the **Locale PC,** or on the **Remote PC**, so in **both modes**.

The above Icons will start the Audio utility software, an additional program.
Yaesu 991A AudioB starts the utility in “Bright” mode.
Yaesu 991A AudioD starts the utility in “Dark” mode.
This Audio Utility is used on the **Locale PC**, in **Local Mode**.



The above Icons will start the Serial & Audio communication Server and the Serial Monitor.
The program SerialServer is always required when **Remote mode** is used.
SerialServer program handles all communication between the local PC and the Remote PC.
CAT (control) commands will be transferred (both directions) from/to remote PC and Transceiver.
Also Audio signals between the Remote PC and the Transceiver are transmitted by this program.

Important:
This **SerialServer software** will **only be used** on the on the **Local PC**.

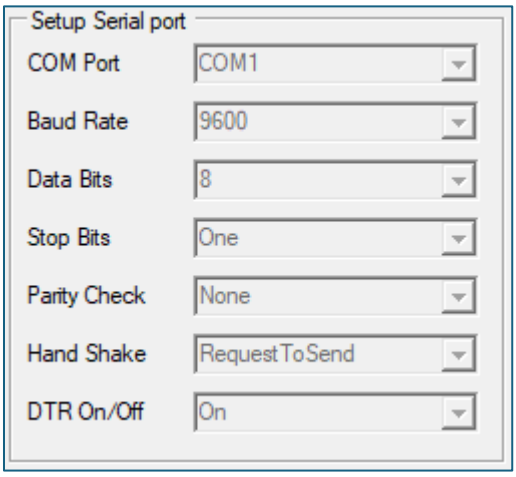


The above Icon will start the Remote Audio Communication software – Receiver & Transmitter.
This program needs to be active whenever Remote mode is used.
This program handles all Audio communication between the local PC and the Remote PC.

Important:
This remote Audio software is always used on the **Remote PC,**
together with the **Yaesu 991A RemoteB or D** program software.

Basic communication settings on the Transceiver.

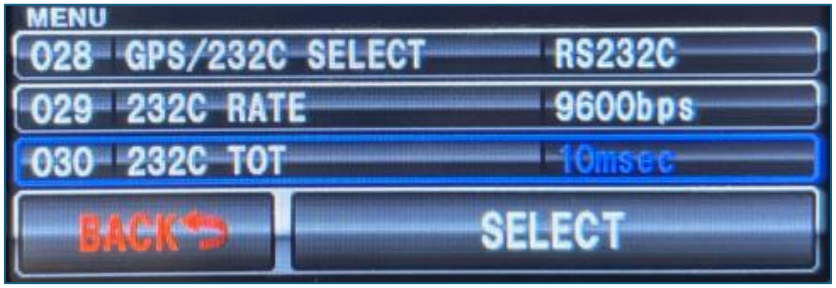
Below you find the default communication settings used by the local PC and Transceiver.
The required setup for the Main application is as indicated below.

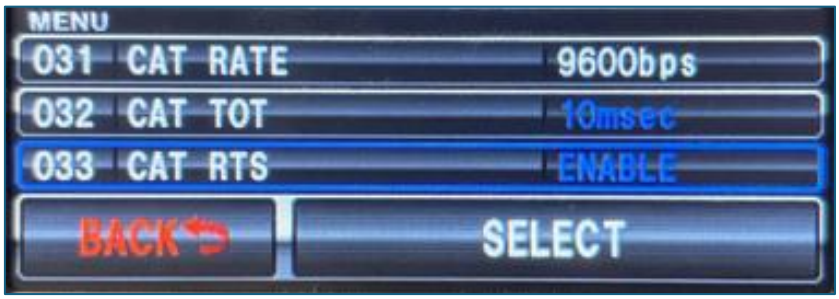


One parameter could be different, that is the "**Com Port**", depending on the Local PC.
The result of the COM Port number is related to the, PC and what USB port you may use.

We need to verify and maybe change 3 parameters on the **Transceiver** (menu settings)!
Change/Set menu item 028 to RS232C.
Change/Set menu item 029 to 9600bps
Change/Set menu item 031 to 9600bps

Items 030, 032, 033 should stay as they are, which is the default settings (see below).





With these settings the software works perfectly on my FT 991A.

Final Check:

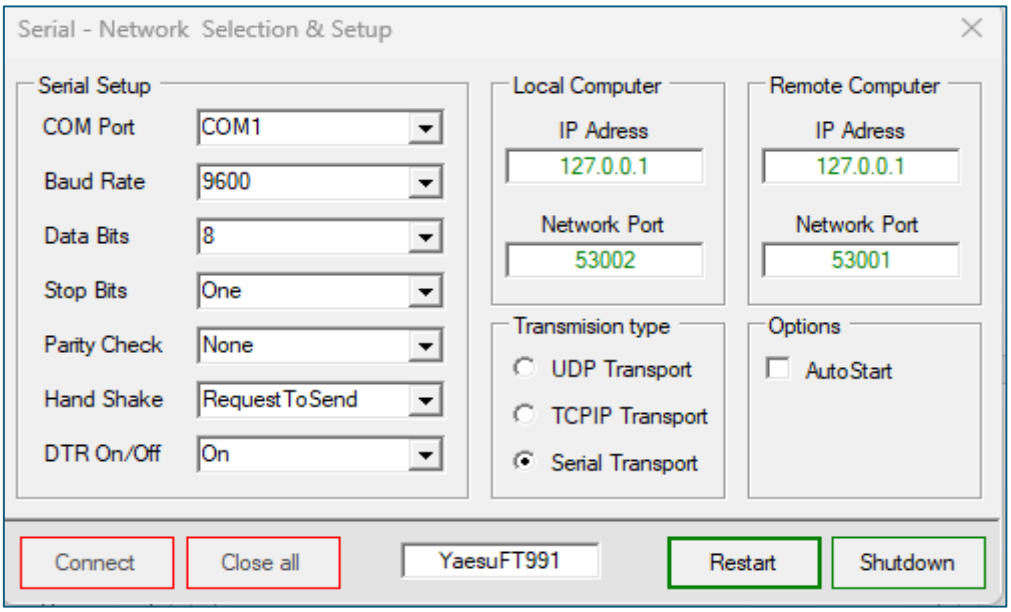
Are the USB Drivers installed and verified inside Windows Device 's?
Is the Software package installed on the local PC?
How to use the software with a Remote PC will be discussed later!
Are all Transceiver menu settings set to the correct RS232C and 9600bps values?

Startup the Main Application.

But first more general info about the remote CAT options inside the Transceiver.

The **13,8VDC** supply must be on, only then the USB port works, and CAT commands are accepted.
Even when the Transceiver is off, the CAT commands are accepted (**used power up remotely**)
When there is no power attached you will **not** find any **COM ports** on the local PC.

When the Main Application "**Yaesu 991A RemoteB**" is started, the serial communication is tested.
If the Application does not get any response (**no COM Port found**), the window below is activated.



Verify if the basic settings are correct, as shown in the above window.
When required change the "**Com Port**" setting to the correct **Port**, and then press Restart.

PS.
The most important goal is, to activate Serial communication first.
If the serial communication fails, then sometimes a **"Shutdown"** is required.
Then restart the Main Application and see if it works this time 😊.
If the software found the COM Port, then use the **"Connect"** button to continue.

When the "**Connect**" button is still disabled, then communication is **not activate**, and TS is required.
The best option is to go to the last page, to verify the available (USB) COM ports availability.

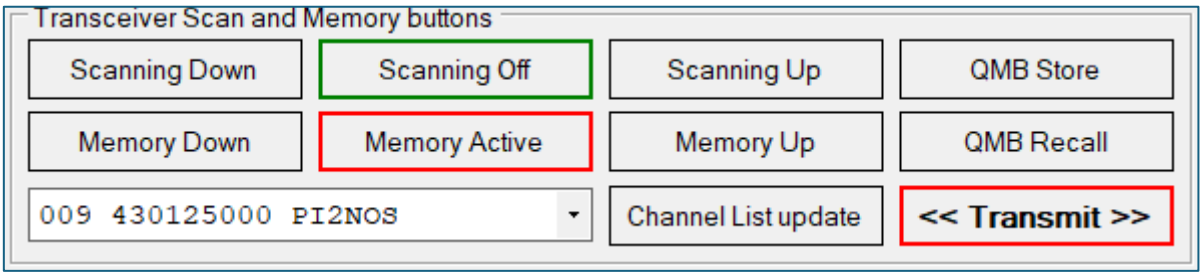
If communication works, the "**Yaesu_991A_Remote.exe**" of "**SerialServer.exe**" software will try to **Activate/Start** the Transceiver and will start to update the screen parameters.

As of now you must be able to use the software and control the Transceiver remotely.
A full manual for the software is not finished ☹, please use the help info on each button.

Most options are simple or self-explaining.
On the Main screen/window the options are divided in clear groups/sections.
For the help/explanations, just move the mouse to any button and read the instructions/Info.
At least you understand what each button should do, when selected.
There are many screens and option (windows) available, please see some examples below.

Example 1:

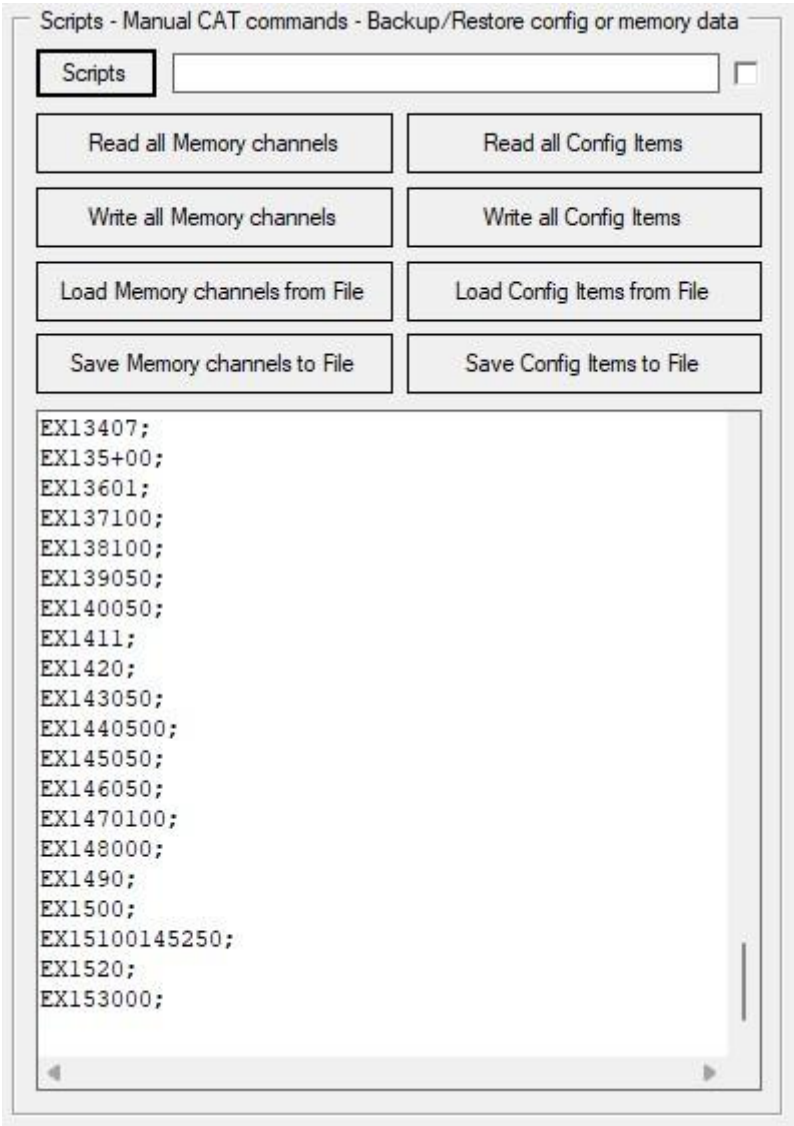
Loading (once) all memory channels that are stored inside the FT-991A Transceiver.



Click on "**Channel List update**" button, and wait till the download is finished.
When finished you can now use all other Buttons to scan trough the memory channels.

Example 2:

Load (once) all configuration parameters from the Transceiver to the software/application.

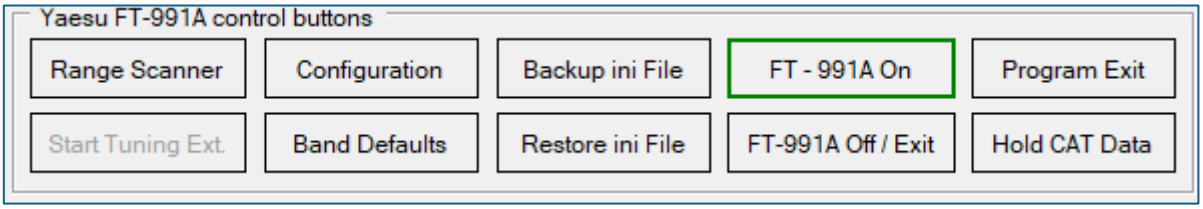


Click on "**Read all Config Items**" button, and wait till all parameters are downloaded.
As of now they are stored inside the main application software.

All parameters downloaded by the first two examples, are now stored inside the ini file.
The name from this ini file is "**Yaesu_991A_Remote.ini**", and it is located in the install directory.

Just to be **very clear**, this file is a **very important** file 😊.

Every parameter stored inside this file is used to run, and define how software works.
Because all settings are stored, it is important enough to create a simple backup option.



To store a new backup just select the "**Backup ini file**" button.
To restore a backup just select the "**Restore ini file**" button.

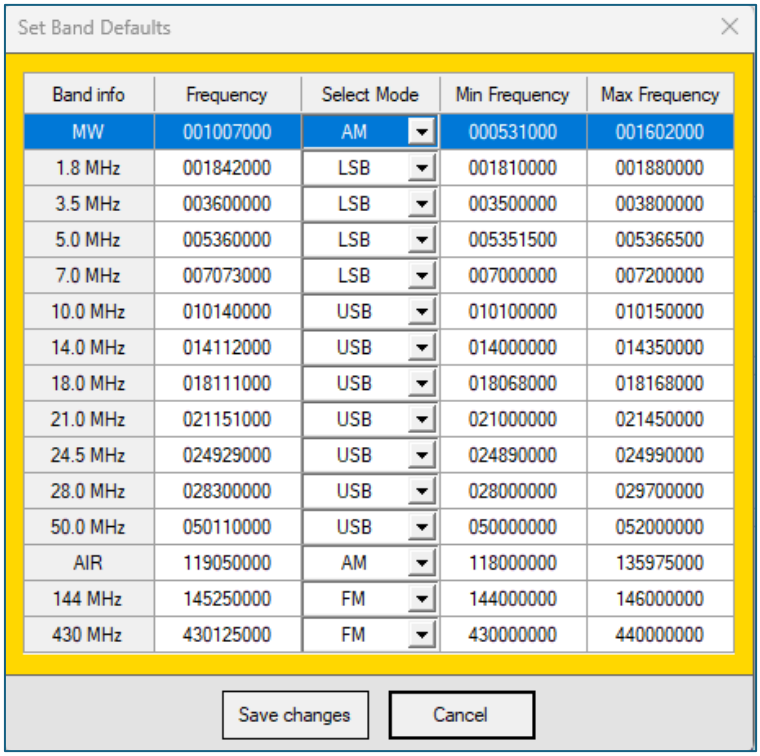
By default all backup ini files are saved in to the default directory "**Install directory\data**" and they will be stored and sorted on date/Time.

My advice is to make (on a regular basis) back-up's after each change.

Another section is the Frequency and Mode selection.

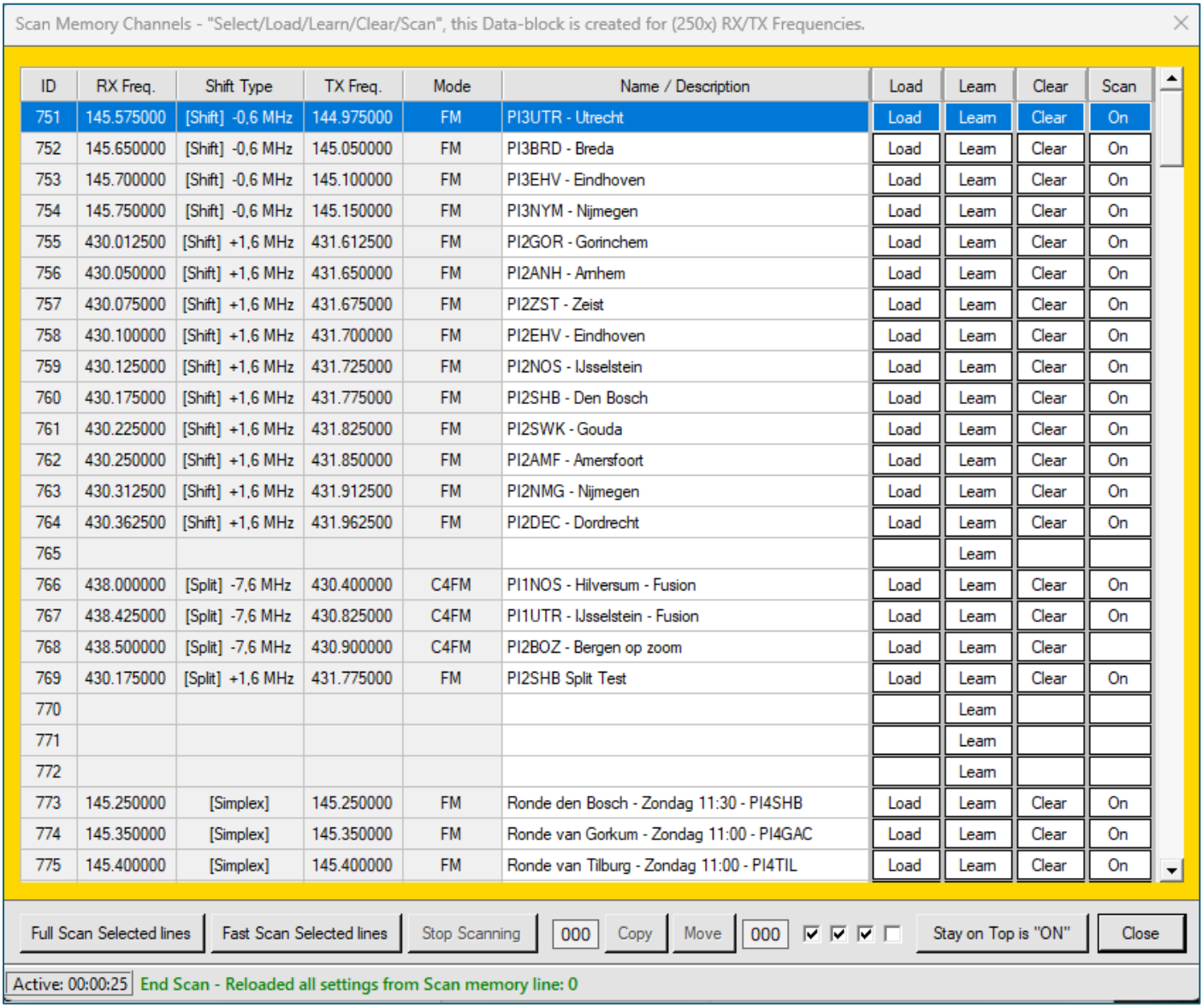
This section allows u to make fast changes between frequency bands and modulation modes.

If you change to another band, then you automatically change to a predefined **Mode** and **Frequency**.
Of course these predefined settings can be modified inside the setup window "**Band Defaults**".



For now the last very important option that (also) relates to the Frequency and Mode selection.
Right clicking any of the Band selection buttons, will activate another window with memory channels.
The window that opens, has a block of 50 programmable memory channels attach to each Band.

In the application we have **1000 extra memory channels** available, that are not on the Transceiver!
For example, right clicking the "**RX**" band button opens the extra memory channel window below.
This general block has 250 programmable channels, and you can choose for, simplex, shift, split, etc.

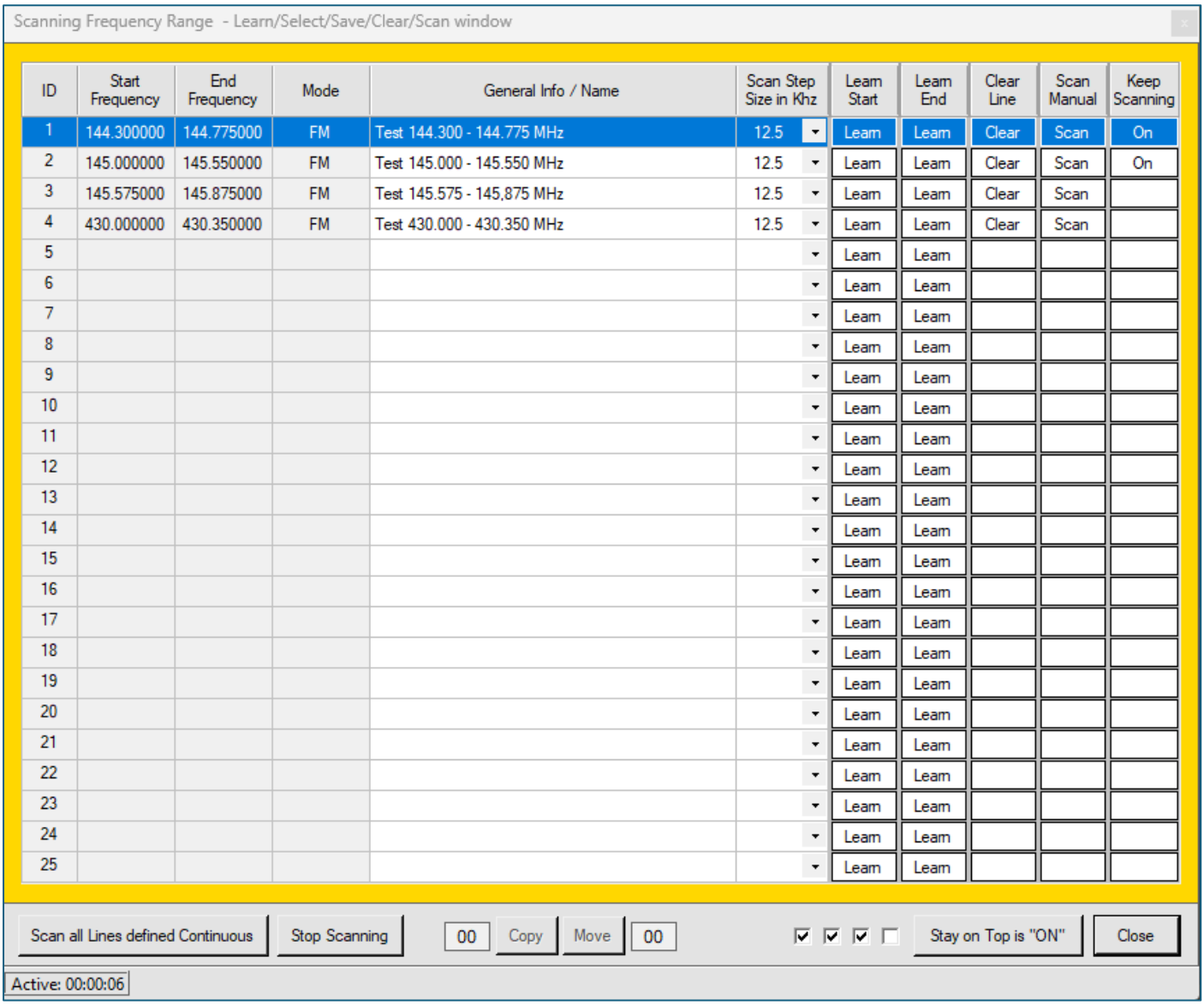


ID	RX Freq.	Shift Type	TX Freq.	Mode	Name / Description	Load	Learn	Clear	Scan
751	145.575000	[Shift] -0,6 MHz	144.975000	FM	PI3UTR - Utrecht	Load	Learn	Clear	On
752	145.650000	[Shift] -0,6 MHz	145.050000	FM	PI3BRD - Breda	Load	Learn	Clear	On
753	145.700000	[Shift] -0,6 MHz	145.100000	FM	PI3EHV - Eindhoven	Load	Learn	Clear	On
754	145.750000	[Shift] -0,6 MHz	145.150000	FM	PI3NYM - Nijmegen	Load	Learn	Clear	On
755	430.012500	[Shift] +1,6 MHz	431.612500	FM	PI2GOR - Gorinchem	Load	Learn	Clear	On
756	430.050000	[Shift] +1,6 MHz	431.650000	FM	PI2ANH - Arnhem	Load	Learn	Clear	On
757	430.075000	[Shift] +1,6 MHz	431.675000	FM	PI2ZST - Zeist	Load	Learn	Clear	On
758	430.100000	[Shift] +1,6 MHz	431.700000	FM	PI2EHV - Eindhoven	Load	Learn	Clear	On
759	430.125000	[Shift] +1,6 MHz	431.725000	FM	PI2NOS - IJsselstein	Load	Learn	Clear	On
760	430.175000	[Shift] +1,6 MHz	431.775000	FM	PI2SHB - Den Bosch	Load	Learn	Clear	On
761	430.225000	[Shift] +1,6 MHz	431.825000	FM	PI2SWK - Gouda	Load	Learn	Clear	On
762	430.250000	[Shift] +1,6 MHz	431.850000	FM	PI2AMF - Amersfoort	Load	Learn	Clear	On
763	430.312500	[Shift] +1,6 MHz	431.912500	FM	PI2NMG - Nijmegen	Load	Learn	Clear	On
764	430.362500	[Shift] +1,6 MHz	431.962500	FM	PI2DEC - Dordrecht	Load	Learn	Clear	On
765							Learn		
766	438.000000	[Split] -7,6 MHz	430.400000	C4FM	PI1NOS - Hilversum - Fusion	Load	Learn	Clear	On
767	438.425000	[Split] -7,6 MHz	430.825000	C4FM	PI1UTR - IJsselstein - Fusion	Load	Learn	Clear	On
768	438.500000	[Split] -7,6 MHz	430.900000	C4FM	PI2BOZ - Bergen op zoom	Load	Learn	Clear	
769	430.175000	[Split] +1,6 MHz	431.775000	FM	PI2SHB Split Test	Load	Learn	Clear	On
770							Learn		
771							Learn		
772							Learn		
773	145.250000	[Simplex]	145.250000	FM	Ronde den Bosch - Zondag 11:30 - PI4SHB	Load	Learn	Clear	On
774	145.350000	[Simplex]	145.350000	FM	Ronde van Gorkum - Zondag 11:00 - PI4GAC	Load	Learn	Clear	On
775	145.400000	[Simplex]	145.400000	FM	Ronde van Tilburg - Zondag 11:00 - PI4TIL	Load	Learn	Clear	On

Above you find an example from many Dutch repeater channels, and all of these channels
we can select or deselect on request, even when **scanning mode is activated**.
All these extra memory channels are save/stored in the discussed "**Yaesu_991A_Remote.ini**" file.
So do not forget to make the backup before you start to edit these channels,
so accidently failures or changes could be reversed or fixed.

An other setup window where you can define (max 25) independent range scans.

From the “**control button**” group, select the button “**Range Scanner**”.



Inside this setup window you can define any frequency range inside any band for scanning.
Start with settings the Transceiver to the correct Mode and Start Frequency, then learn Start & End.

You need to teach/provide the Start and End frequency, and select what Step size you want to use.

Every defined line can scan by itself, in single, or continues mode. Combining lines is possible.
During scan mode you can still select each line to be enabled or disabled.

That’s it for now, please use and tryout the software 😊

Greetings PE1FQF and 73 ‘s

<< End of these general instructions >>

Check all available Communication Ports.

Re-Check the used/installed USB cable, and the available COM ports.

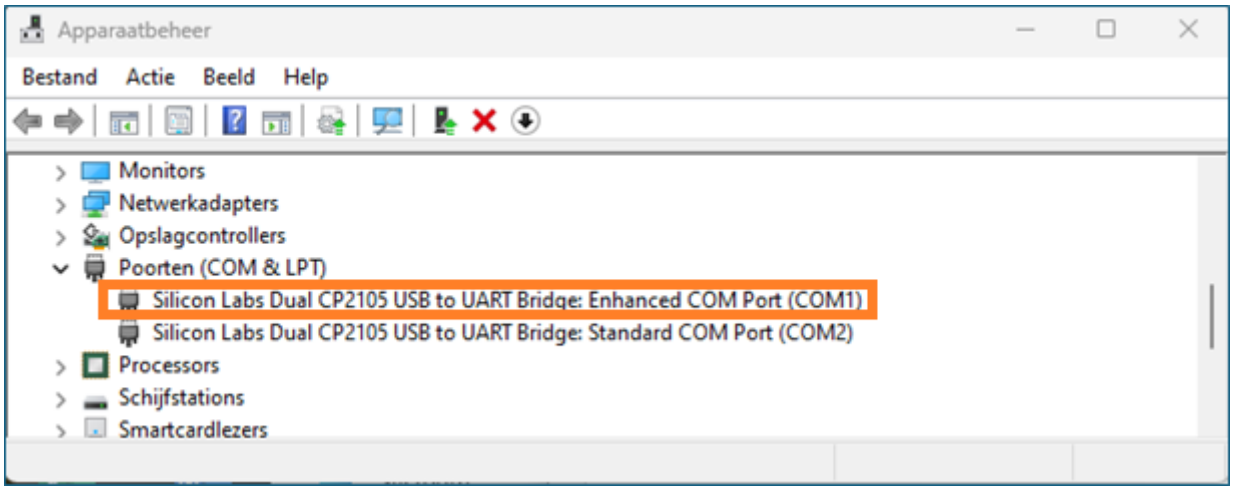
Type “**devmgmt.msc**” inside windows execute window.

If done correctly it should show/open the devices management window.

Go to “**Ports (COM &LPT)**” and open this section.

Make a note of the COM Port number, behind “**Enhanced COM Port**”, so **Com [1-10]**

This comport number is the COM Port that needs be used for the Main program.



If you cannot see the two CP210x Com ports, then
the USB driver software is not correctly installed.

Go back to page 1 for re-installing the USB drivers.