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RFRScanner – version 1.1.4 – NOV/2023 http://www.intrasystem.it/Frequency/Frequency.html



- dB, dBase = Database
- RFR = RFRScanner
- Read the Tooltips
- Read the [H]elp Labels

- Elad Rig user: SW2-Menu > [Remote Ctrl] > Enable OmniRig + TCP
 - Each View remains in the position where you left it.
 - Open Port [Re]fresh Com-Ports

The new BackGround View: BackGround

The Frequency Analyzer v 1.0.0

Frequency FFT	
Stop	
Filter : 10 Amplitude: 1,50 BandWidth (Hz) : 3000	
7041,71 2210 7041,00	
0 Hz 301 Hz 601 Hz 902 Hz 12	202 Hz 1503 Hz 1803 Hz 2104 Hz 2404 Hz 2705 Hz 3000 Hz

Bandwidth: 1000 to 20000 Hz - Default 3000 Hz

Amplitude: 1,50 Default value

[2210] Mouse-Pointer Hz position

[7041,71] Mouse-Pointer Hz position = Frequency 10Hz precision Mouse-Click, tune the Radio to this Frequency.

[0,71] Frequency deviation in Khz. +/- You can use it as Frequency Scanner.

[7041,00] actual tuned Radio frequency



The Band Scope image. (a different waterfall) Signal width = the Signal strength.

[40] = Gain Response (0..55). 0..increment. Default = 6.

[500] = FFT delay in ms. (Default)

[]Mem 1 + 2 = save a Frequency + Set a Frequency. R/L-click.

[ms] Read speed in ms . Default = 100 ms.

Next >>>

[1] Band Scope + Waterfall [2] Waterfall selected as fixed Image + frequencies

The new Frequency Analyzer v 1.1.0 Band Scope + Waterfall

- A single signal is always the real tuned frequency = the Center Frequency 7022,00 Khz.
- The **red** Vertical Center-Signal is indicating only 1 Signal present. No yellow Waterfall signal visible.
- With more than 1 Signal the Center-Signal is assuming the Color "Lime".
- When you click on the Center Signal you tune to the actual Radio Frequency. The yellow Band Frequency is "Red".
- Move the Mouse-Pointer to any other position and select/click. The correct "yellow" frequency is tuned.
- The same applies to the listed frequencies. Menu > [List Freq]
- The Waterfall Image view [2] is showing the same signals until you Fix the Image. (not with the final FFT version 1.1.1)



3/5

The new Frequency Analyzer v 1.1.0 + 1.1.1 **The Waterfall Image – CW example**

- Move the Mouse-Pointer into the [2] Waterfall Image.

- R-click and Fix the [1] Waterfall image.

Frequency Spectrum Analyzer FFT

- R-click again and close the Image. The entry-frequency is 3514,12 and your Radio is returning to this frequency!
- Mouse-Move, the Peak in Hz is indicated. Here, 1551 and only the yellow Frequency indication is changing (3515,05)
- Click on a Signal (yellow) or any other position. The relative Frequency (yellow) is tuned.
- All positions and frequencies are Fixed and not changing if you select and tune a different Frequency.

While the Image is open you could change the Frequency or Band and return to the Image. Often used during all Tests.

The choice of the FFT-delay determines the time/moment the Waterfall image is copied.

The Final Analyzer FFT Image v 1.1.1 has a

Different Mouse-Click behaviour! (see 5/5)

By adjusting the "Gain" (increase) less strong signals are read. Follow the Band-Scope.

Before fixing an image make sure that the signals are stable at least for the time of the

Do not forget to adjust the Radio AF Gain

While the Image is open the View [1] is reading the Band Spectrum. You can click/select

There are 3 CW Signals on the Image. 1 is on top of the green center-frequency. When you close the Image the Frequency is returning to the start-Frequency 3514,12

(RFR) ShortCut (F7) – memorize a Frequency. The Frequency dBase View must be open. (F4)

Next >>>

3515,07 Δ. List Freq Stop Wave н 3515.08 Gain 3514,15 Filter : 10 40 3514.16 3514,16 1,50 + Amplitude: FFT-delay. 3514.17 FFT delay 3514.17 ÷ 3514,15 BandWidth (Hz) : 3000 500 1 3514,16 volume. 3514.16 Mem 1 Mem 2 Stop Frequency th 3515,05 н ms 0.05 3514.39 ÷ 100 The Center-3514,12 3514,12 1551 Signal width = the Signal strength The Band Scope any Signal-Frequency. 1 301 601 902 1202 1503 1803 2104 2404 2705 3000 Hz The Image does not change. The Waterfall 3000 Hz 2404 301 601 902 1202 1503 1803 2104 2705 Image 🗾 The saved/fixed Image

The new Frequency Analyzer v 1.1.1 + 1.1.2 **The Waterfall Image – RTTY example**

Increasing the Gain is increasing QRM. Use DSP filters or your Radio Filters.



Here the **Gain** has a high value otherwise we could not receive / see the weaker signals.

A word about frequency listing.

[List Freq] is opening and starting the Frequency listing for any Waterfall-Signal received. You can [Stop] the listing and selecting / tuning the frequencies. On Re-Start the List is empty. Closing the List View [List Freq] the list is empty. After 1000 items the list is empty and re-starting. (final FFT version 1.1.1) The Frequency List is sorted. There are no repeated frequencies. (final FFT version 1.1.1) When you just tune your Radio it is suggested to stop the frequency listing.



ShortCut: F8

Repeat with half sec interval. Stop F8 = the last [1] Waterfall. Image is copied + copy is confirmed with the Red copy-label. While you use the F8 ShortCut the Red copylabel is white.

V 1.1.1

Exit Image [2]

R-MouseClick

While the Image is open you can change Frequency or Band and return to the Image Frequency and Band. Often used under Test.

The new RIG Editor CAT Control x any Rig

CAT Control for any RIG

PC control commands - SerialPort (RS-232)	○ Simulate Receiver	
SET Frequency Command	Get Receiving Frequency	Operating Mode Controls x single Rig's
Invert Frequency as BCD-String ? 5 Byte Standard Frequency as BCD-String ? 4 Byte Example: IC-735	Alphabetical Start-Command FE FE	Any Operating Mode is using 3 commands. Set, Read, Answer. You supply the Set , Read and Answer Parameters. The Read command is returning the Answer.
Rig Name Rig Type IC-7400 Icom >> Operating Mode	AddressCI-VCommandE06603	Ready examples: Kenwood_ts990 IC-7300 IC-R8500 DUO/r Comment Rig Name
Alphabetical Start-Command	Frequency Mask	Ci-V 66 Char Terminator IC-7400
FEFE	0000000000 11	Prefax P1 P2
CLV Padia Address number	BCD Mask	Set FE_FE_66 ^ _E0_ 01:USB ^ + _FD
66	00 00 00 00 00 14	03:CW 04:RTTY
Address + Command N° Set Command E0 05	FD Char Terminator	05:FM 07:CW-R 08:RTTY-R
Frequency Mask	Receiver answer	Prefax P1 P2
000000000 11 >		Read FE_FE_66_E0 _04_ + FD
Char Terminator	Read Frequency Byte Digit 00 00 00 00 00 FD > Get Freq	
FD		Prefax P1 P2 Length
Baud Rate Set Frequency Command	Get FrequencyRead StartFE FE 66 E0 03 FD15	Answer FE_FE_E0_66_ 04_ 01:USB ^ + FD 20
Transmission type Hex V H Select IC-7400.rig V 9	Prefix in answer Digit 14 FE FE E0 66 03	04:RITY 05:FM 07:CW-R 08:RTTY-R
X Clear Fields Load Files H Save	Confirm Data	V Clear Fields H

Read the [H]elp

The underline Char (_) is a visible space distance. (BCD)

Rigs Cat control added. You can add any Rig with the RIG Editor.



The Frequency Band Selection is tuning the Radio to the Start-Frequency.

Band Selection is changing the Scan from...to frequencies.

Icom Rigs Cat control included

RFRScanner x86 v. 1	.0.0 (fv	v 3.5)				_		×
Icom Rigs saved	тср	OmniRig	Rec	Freq FFT	Options	Help A	bout	
RFRScanner x86 v. 1 Icom Rigs saved Select RIG IC-703 IC-703 IC-706MKII(4E) IC-706MKIIG IC-706MKIIG IC-706MKIIG IC-725 IC-726 IC-728 IC-728 IC-729 IC-735 IC-735 IC-736 IC-746 IC-746 IC-751 IC-756PROII IC-756PROII IC-756PROII IC-756PROII IC-765 IC-775	0.0 (fv TCP	V 3.5) OmniRig 400 (F opene Freques 7000 Step 5tep 1 KHz	Rec Rig) ed at ncies	Freq FFT 02/08/2 to 70 Delay ✓ 300 □ Int	Options 020 14:2 050 msec V H H	Help A 22:42 OmniRig Com-Por DUO/DI RIG: IC ComPort Manual R 3511	Ci- Ci- Ci- Ci- Ci- Ci- Ci- Ci-	× 7 66 ne M1
IC-781 IC-781 IC-970 IC-7000 IC-7200 IC-7300 IC-7400 IC-7600 IC-7700 IC-7700 IC-7800 IC-7800 IC-R71	v					Send	Dispi	ay

37 Icom Rig's are included. (Frequency + Mode) The Rig's Editor is including Icom Radios as example only.

The examples are useful in case the Mode-Parameters are different from the general Icom parameters.

Import/Download SW2 Stations Memory into RFRScanner Frequency dB (SW2) you connect any Rig with SW2



Import SW2 Frequencies + UpLoading to SW2 Station Memory is automatic. Import SW2 xml-file

When downloading a SW2 *.xml Station File the RFRScanner (SW2) <u>Local Frequency dBase is replaced</u> ! (Backup is done in automatic)

When the download procedure is terminated check the CHECKSUM. If you download 140 records the final message must state: 140/140. In case of Error: Repeat the procedure.

If you want a different xml file, NOT the one SW2 is actually using, you must first load that file into the SW2 Station Memory. Download is only reading the actual xml-file SW2 is using.

Make sure: TCP interrupted [Stop], Com-Port closed, RFRScanner OmniRig closed !

Next >>>

1/3

Import/Download SW2 Stations Memory into RFRScanner Frequency dB (SW2) 2/3

Download Records SW2 LIMITATION !

Read the Elad SW2 TCP Bugs explanation > RFRScanner > Help >TCP Bugs

Record start reading at digit 10 MS000002>>>> (2 Records) 'Mask digits = 110000000000 Frequency digits = 16Station Name '0000000000000000' Bug Mode digits = 6 reserved. Used 1 digit only. '000000' Bug MS0000002 Prefax + Nr. of Records (max. 60 Rec x each request) Max Read-Records = 9999 Get Rec From...To is limited to 4 digits = 9999. SW2 TCP Manual is indicating 99999. 00007646000 Frequency ODeutscher Wette Station Name (Deutscher Wette) 15 digits (with 16 digits BUG/Error) 1 Mask-zero in front. X00000 X = No Mode|4 digits MS00000099609998; Last Rec request from 9961 to 9999 (39 rec) You download/import max 9999 records. TCP SW2 Import the SW2 Station dBase. RX1 IP RFRScanner 192.168.1.64 Port: \times 1893 Η Import the SW2 Station Memory ? ms 50 Connect 30213 Records Total Records: 30213 Read MS0000039000066760000Brisbane VOLMET50000000066760000Brisbane MS000000099609998; Send No Yes OK MS00000(Import SW2 Station Up-Load

If your SW2 xml-file has more then 9999 Records you should use the Converter. Read the Page: (2) Database Converter. Assuming that the dBase was created with the Converter.

With "Lock to CF" on RX1 TCP/SW2 is NOT Returning the Frequency. (Logical Bug)

Import/Download

PC / TCP Interference

TCP Import + Upload is quite sensitive.

Close other programs.

RFRScanner does not create any errors! Hundreds of tests confirm Bug free.

The Import procedure is the most sensitive.

The program executes the request for data from SW2 100 times if the answer is not correct. Only after 100 *continuous* reading errors the procedure ends with error.

When the procedure starts, a clear message appears: Translating Wait. Don't Intern Only confirm the first "OK" information messages. The procedure starts automatically.

Now wait and don't use the mouse or keyboard.

Any procedure interruption is due to PC and programs interferences. Any SW2 data change can compromise the TCP connection for these 2 procedures. Close RFRScanner + SW2. ReOpen SW2 and RFRScanner .

If after a closure and reopening, RFRScanner and the SW2 software, the procedure does not end correctly, it is advisable to do a PC Reboot!

UpLoad actual RFRScanner Frequencies to SW2 Station Memory (*.xml)

New FileName/File or Add records to a existing xml-file.

TCP must be interrupted. [Stop] button. Com-Port should be closed. OmniRig should be closed. (local RFRScanner Omnirig)

UpLoading the local RFRScanner frequency dbase (SW2). You can select:

Add to a existing xml-file (select Filename)
Add to the actual file SW2 is using (select Filename)
Create a new one (Filename – No extension)



Input the FileName (no extension) only if you create a New xml Database File.

When the Up-Load procedure is terminated check the CHECKSUM. If you Up-Load 140 records the final message must state: 140/140. Error: Repeat the procedure.

Only a new xml-file is present in your actual Program Folder. Copy this file into your Elad Folder. A selected File remains in the selected Folder.

Uploading is adding Rec with same Frequencies I The procedure is running in automatic.

TCP SW2 connection S1...S3, DUO, DUOr DUO/DUOr commands





The Input Field x FileNames and TCP commands.

You can simulate the TCP commands.

Input a **command** and then click on the [Send] Button.

F9 ShortCut TCP View F11 ShortCut Select RX1..4

RFRScanner Scan Frequencies

Using only internal procedures not the Rig scanner commands.

	RFRScanner x86 v. 1.0.0 (fw 3.5) - X	Scan Frequencies
	Icom Rigs saved TCP OmniRig Rec Freq FFT Options Help About	from to
	11:40 DUO-A (Rig) Ci-V - 09:40 Port opened at 03/08/2020 11:39:22 Ci-V -	Step Delay msec Step 1 KHz \$300
open Port	Close Port Scan Frequencies OmniRig Off-Line	100 200
[Re]fresh Com-Ports	Port Data 7000 X 7050 Port COM1 → Step Delay msec Baud Rate Step 1 KHz 300 → Com-Port: COM1 115200 → Step 10 Hz 300 → Com-Port: COM1 Parity Step 10 Hz Int H DUO/DUOr: On None → Step 1 KHz Int H DUO/DUOr: On Stop Bits Step 1,05 KHz * Step 2,5 KHz RIG: DUO-A One → Step 6,25 KHz ComPort ComPort Step 6,25 KHz Step 6,25 KHz Manual Frequency input 3511.00 Step 12,5 KHz Step 12,5 KHz Step 12,5 KHz	Start 300 400 500 1000 2000 2000 3000 Repeat 20 times C Start 20 H 20 H Stop scanning. Double click 'Stop'.
	RFRScanner x86 v. 1.0.0 (fw 3.5) ×	C Start Stop 20 H [x] Int is interrupting
	If checked scanning is interrupted with a Message showing the Frequency. You can interrupt and listen to a Frequency as long as you like. Be careful because you could not interrupt the scanning itself. You should use it with a small dBase List or a small Frequency range from > to.	[x] RFR List Scan the saved Frequencies. (RFR)

Channel2 Omni ComPort > 10 > VSPE > 11 Channel1 **OmniRig** RX1 Serial Port COM11 Baudrate 115200 RFRScanner x86 v. 1.0.0 (fw 3.5) \times Rigs saved OmniRig TCP Rec Freq FFT Options Help About lcom Open Dialog 16:33 Ci-V -D Open Client.exe 14:33 P 14:22:42< First Open Client.exe Open OmniRig Close Port Stop OmniRig OmniRig Off-Line RFR > Elad Radio direct Select Rig ۲ The best way is using a Port Data 1 Port existing COM-Port and set it Select OmniRig Path COM1 H 16 (752) Stop \sim with VSPE. Example: Step Delay msec Baud Rate Step 1 KHz 300 COM1 to Com3. \sim \sim Com-Port: COM1 115200 Com3 is used with all other н DUO/DUOr: On Parity Software. . None \sim RIG: DUOr-A Start Н Stop Bits **Read the page:** One ComPort / TCP

Manual Frequency input

Display

3511.00

Send

Copy actual Frequency to the Manual Frequency Field. (Remember)

VSPE virtual Com-Ports

Click 2 x the [Send] button Not fast Or the "Enter Key" if your Mouse Pointer is inside the "Manual Frequency.." Field.

RFR is including the OmniRig DLL procedures and connecting directly. Avoid using the RFR-OmniRig if your Device/Rig/Software is already connected! Example: ELAD SW2 could be connected. RFR OmniRig + RFR [Open Port] device connecting is not allowed.

FA00003511000;

3511.00

You can use the RFR OmniRig x connecting RFR with any Rig (Icom ecc.) directly. Adjust the OmniRig Dialog accordingly. ComPort, Rig and Baud-Rate. You don't need a ComPort Emulator like Vspe ecc. RFR Rig-Selection is not necessary

3.511.00 c

Manual Frequency input

The Basic connection just between SW2 and Flad Radios is automatic. No settings are requested

Depending on the SW2 version pay attention to the following SW2 reaction when you connect Omnirig to the RFRScanner.

If the SW2 Frequency is not "stable" then: - activate the [LOCK] - disactivate the [LOCK] Now the Frequency is

Data Bits

 \sim

 \sim

FE FE 4A E0 05 00 10 51 03

3.511,00 c

Ð

8

80m

RFRScanner

Audio Recorder



Recorder				
Options				
Backup *.wav Files				
Help Backup				
Delete *.wav Files (all Files)				
Your Audio Devices				
Delete Local *.wav Files in List				
General Help				
Create your Recording ShortCut				

Select your ShortCut. ESC = Default.



When the Recorder View is closed the "ESC" Key (Shortcut) is always active.

"ESC" is starting the Recorder and pausing. The Menu "Rec" is changing color to 'Red' or 'Green'.

You can quickly switch between 'Rec' and 'Pause'.

To Stop the registration open the Recorder-View. Click on [Stop].

The Audio Recorder can be activated from any View using the Shortcut.

Menu Options

RFRScanner x86 v. 1.0.0 (fw 3.5)	– 🗆 X	
Icom Rigs saved TCP OmniRig Rec Freq FFT	Options Help About	
17:43 DUOr-A (Rig) 15:43 Port opened at 02/08/2 Close Port Scan Frequencies Port Tom Port 700 Port 700 COM1 Step Baud Rate 115200 Parity None Stop Bits One Data Bits 8 ************************************	Exchange fldigi Frequency Start CW Skimmer dbMaster Call Locator Frequency List View. SW2 + LOG Calendar Exec1 Exec2 HAM Links Propagation HAMQTH DXCluster VOACAP QRZCQ eQSL VOACAP QRZCQ eQSL	er
Input your Web Browser. Default = Internet Ex Example: Internet Explorer, Firefox, Chro Actual: Firefox	CWSkimmer is opening/running automatic. Exec1 (2) Run external progra Example: the Converter progra	g in ms. am
Exit	Confirm	

Callsign database Cor Log-Edit/Modify View and the Log-Data Entry View.

The dbMaster database is Connected with the

		My Locator
dbMaster Callsign + Locator	Open > Options > dbMaster Call Locator (F6)	JN55WJ Input your Locator
2E0A0Z 10931Q	A	
2E0BPP IO83SS		
2E0CEA	Input CallSign x Search. (partial)	Input CallSign x Search. (partial)
2EOCEY	Input CallSign to Add.	Input CallSign to Add.
2EOCNL		
2E0CON	2E0BPP X	
2E0CVN	Locator Km Nm	Locator Kan Na
2E0CZE		
2E0DSQ	? IO83SS 1386 748	
2E0EMF		Cole Distance 2 Char search
2E0EMU	Find a Locator.	
2E0FCH		2E England G
2EOFFT		2I Northern Ireland GI
2E0FPC		2J Jersey GJ
2E0FQT	Search > Next	2M Scotland GM
2E0GBK	Jearon y next	2U Guernsey and Dependencies GU
2EOGEL		2W Wales GW
2E0HAG		3A Monaco
2E0HCL	Add/Save H	3B6 Agalega Is
2EOHES		3B7 Cargados Carajos (St Brandon) 3B6
2EOHPI		3B8 Mauritius
2E0IFC		3B9 Rodriguez I.
2E01KM	Delete	3C Equatorial Guinea
2E0IMD		3C0 Annobon I.
2E0JOF		3D2 Conway Reef
2EOKBL		3D2 Republic of Fiji
2E0KDN		3D2 Rotuma I.
2E0KDT		3DA0 Swaziland 🗸
2EORDT/P		< >
2E0KFH	Selected Item	Selected Item
2E0KGX		
2EOKHW	Country 2EUBPP IO8355	Country 2E0BPP 108355
2E0KPD		
2EOKVJ		
2EOLJZ	Huleester	H
2EULKC		
ZEULPA	F6 X	Loc JN55WJ F6 X
45668		

Frequencies saved (RFR) Elad SW2 Stations imported and added (SW2) (SW2) local Frequency dBase (RFR) ShortCut (F7) – memorize a Frequency

dbStations + L	og-Data						dbStations +	Log-Data		Оре	en > (F	4) Free	quency List	View
Log Entry	Delete Frequencies H	elp					Log Entry	Delete F	requencies	Help				
Frequency	Utc Date Time	Band	Mode	Rig]	(RFR)	Frequency	Utc I	Date Time		Band	Mode	Rig	(RFR)
7022.64	02/08/2020 09:17:0	03 40m	LSB	DUC	Or-A		7022.64	02/08	/2020 09:3	17:03	40m	LSB	DUOr-A	
7022.31	02/08/2020 09:23:	03 40m	CW	DUC	Or-A		7022.31	02/08	/2020 09:2	23:03	40m	CW	DUOr-A	
7022.34	02/08/2020 09:37:	38 40m	CW	DUC	Or-A		7022.34	02/08	/2020 09:3	37:38	40m	CW	DUOr-A	
	R-Mouse-Clic F7 = Memorizo	k > Delete e the actu	Record. al Freque	ency.					R-Mouse- F7 = Mem	Click > orize t	• Delete he actua	Record. I Frequen	су.	
Frequency	Station	Mode	Band H	lam	(140)	(SW2)	Frequency	Sta	ation		Mode	Band Ham	67	(SW2)
474.20	WSJT 630m	USB					474.20	WSJT	630m	1	USB	-		^
936.00	Rai l	AM	- 1	к-мс >	Delete Rec	ord.	1836.60	WSJT	160m		USB	160m		
1000.00	test	AM	AM				1839.00) WSJT	160m		LSB	160m		
1000.01	-	RTTY	AM				1840.00) WSJT	160m		LSB	160m		
1827.45	Saved Frequency	USB	160m				2500.00	J WSJT			LSB	-	Search result.	
1836.60	wS51 160m	LSB	160m				3568 6) พร.าก	905		LSB			
1838 15	-	LSB	160m				3570.00	WSJT	' 80m		USB	80m		
1839.00	WSJT 160m	LSB	160m			× 1	3572.00	WSJT	80m		USB	80m		~
Frequency	St	ation		Mode		(SW2)	Frequency			Station	1	Mo	ode	(SW2)
			E		\sim	Save						-	\sim	Save
From Freq	To Freq	Station Te	ot		H	iearch	From Freq		To Freq	W	Station Text	copy to	(RFR) H	earch

When the Main-View has Focus the F7 ShortCut is also memorizing the actual Frequency. The Search-Result Frequencies can be copied to the (RFR) List. Re-Call or Scan the (RFR).

RFRScanner LogData Input (LOG)

Open > (F4) Menu > Contest > Activate Contest Log



Transmission Type – Is requested for the ADI File. The Mode Data is only used for Radio tuning. Different Modes x different Radios.



R-Mouse-Click > Delete Record.

It is suggested to open the dBMaster CallSign dBase (F6). Both are connected.

RFRScanner LogData Input (LOG)

lbMaster Callsign + Locator	Open > Options > dbMaster Call Locator (F6)	dbStations +	Log-Data Open > (F4) > Log Entry > Activa	te Log Entry
HA8MD		Log Entry	Delete Frequencies	
HA8MT		Spotter	Lite Date Time Band Fraguency Mode	
HA8MZ	Input CallSign x Search. (partial)	Spotter	ole bate time band thequency mode	Tetype (LOG)
HA8PK	Input CallSign to Add.	DO1RTH	05/10/2020 01:32:10 80m 3520.00 CW	^
HA8QB		DO6RV F6ACM	12/10/2020 22:53:04 80m 3556.70 CW	
HA8QC	HA8RM	HA2KMR	29/09/2020 03:35:15 80m 3530 00 LSB	
HA8QZ	Locator Km Nm	HASRM	29/09/2020 04:57:14 80m 3508.16 CW	
HA8RC		LZ1NP	29/09/2020 03:58:02 80m 3522.00 CW	
HA8RM JN96UW	? JN96UW 627 338	OL9A	26/09/2020 07:22:17 80m 3588.00 USB	
HA8RT	Colo Distance 2 Char search	OM3TBG	12/10/2020 22:34:57 80m 3556.70 CW	× .
HA8TI		< .		>
HA8TKS	HA Hungary			
HA8TP	HB Switzerland		-	(LOG)
HA8V	HBO Liechtenstein		2509.16	
HA8VK	HC,HD Ecuador		Frequency 300, 10	
HA8VV	HC8,HD8 Galapagos Is			
HA8VX	HE Switzerland HB		Spotter HA8RM	
HA8VZ	HF Poland SP			
HA8WY	HFO HL5 LUnZx South Shetland Is cont.			
HA8WZ	HG Hungary HA		Trans. Type 🔽 📉 🗡	
HA8ZB	HH Haiti			u ~
HA8ZE	HI Dominican Republic			
HA9AX	HK HJ Colombia			
HA9MDN	HKO HJO San Andres and Providencia			
HA9PP	HKO Malpelo I.		Name (10)	
HA9RC	HL Korea (Republic of)		km	
HA9RP	HP HO Panama		distance	
HA9RT	HR HQ Honduras 🗸 🗸			-
HA9SB	< >>		40 00:34 Save > F7	X
НАЭТ	Selected Item	L		
НАЭТА				
HB0/DK4YJ	Country HA8RM JN96UW			
HB0/DL2JRM				
HB0/DL5SE				
HB0/DL5YM	H			
HB0/HB9RB	My Locator			
HB0/IU6AKY	V Loc JN55WJ F6 X			
45697				

Contest worked CallSign control

Contest Log	dbStations + Log-Data Open > (F4) > Contest > Activate Contest Log
IKOAGU 19/11/2020 09:11:33 1836.00	Log Entry Contest Delete Frequencies
	Spotter Activate Contest Log Frequency Mode T-Type (LOG)
	N3DE Show Contest Log n 3507.40 CW
	EU4CK Delete Contest Log n 3538.00 CW
	OM2XW 19,11,2020 00:26:00 160m 1830.00 LSB
	IK0AGU 19/11/2020 01:00:31 160m 1835.00 LSB IK0AGU 19/11/2020 09:11:33 160m 1836.00 LSB
	Frequency 1836,00
	Spotter
RadioFrequency X	
Mouse Right Click = Delete the selected Record	
mode right enex - Delete the selected record.	QSLMsg (16)
OK	Nome (10)
<u> </u>	
	441 Contest Log is active.
	49 09:14 Save > F7
H Save	

Wrong Contest Contact ? Delete the Contact from the Contest Log List.

3/4

Contest worked CallSign control

Contest Log	dbStations + Log-Data Open > (F4) > Contest > Activate Contest Log
IK0AGU 19/11/2020 09:11:33 1836.00	Log Entry Contest Delete Frequencies
IKOAGU 19/11/2020 09:11:33 1836.00	Log Entry Context Spotter CallSign already worked. Particular CallSign to the Log database ? N3DE E77A EU4CK OM2XW DK6ED IKOAGU IKOAGU Yes No (LOG) Frequency 1836,00 Spotter IKOAGU Yes No (LOG) Frequency 1836,00 Spotter IKOAGU WORKED Clear Trans. Type QSLMsg (10) km 441 Context Log is andline. 49 09:17 Save > F7
1 X H Save	

Contest Contact Control checks and verifies if a contest contact already exists. The Contest LOG is a separate List that must be canceled before starting a new / single Contest. Verification is activated when we confirm a contact (LOG Entry - F7).

However, you can validate the contact for the LOG database by confirming the message that appears.

Edit / Modify LogData / Search

1/5

Modify / Edit Log-Data Open > (F4) > Log Entry > Modify / Edit Log ADI/ADIF Comment / QslMsg 3728.00 LSB CW 907 04/11/2020 21:04:40 80m CQ Contest DL7AT * CW \sim Andreas Name Q 80m LSB \sim C/Q Transm. Type Spotter Utc Date Time Band Frequency Mode Distance Km Master Name Comment C/Q 9A1AA 16/10/2020 14:05:23 7013.50 CW 507 С 40m CW * Ivo С CW 520 * 9A5M 29/09/2020 04:03:40 80m 3510.00 CW DJ5PM 18/10/2020 20:50:12 80m RTTY 872 * 3597.00 USB Horst DK8VD 12/10/2020 22:22:51 80m 3556.70 CW CW 621 * Dieter 05/10/2020 00:29:26 CW 607 * DL2ASG 80m 3558.20 CW Martin DL6DH 3590.00 USB RTTY 18/10/2020 21:18:11 80m 681 * Henning RTTY * DL6SFR 18/10/2020 22:10:24 80m 3595.50 USB 414 Steffen DL7AT 04/11/2020 21:04:40 Andreas CQ Contest 80m 3728.00 LSB CW 907 * 0 DO1RTH 05/10/2020 01:32:10 80m 3520.00 CW CW 576 * Christoph DO6RV 12/10/2020 22:53:04 80m 3556.70 CW CW 324 * Stephan 80m E77A 29/09/2020 04:44:22 3511.50 CW CW 491 * Slaven EI2JD 18/10/2020 22:01:07 80m 3595.50 USB RTTY 1594 * Thos F4EGA 18/10/2020 22:16:14 80m 3595.50 USB RTTY 845 * Patrik F4HER 18/10/2020 21:21:31 80m 3590.00 USB RTTY 909 * Philippe v Spotter H Search H Clear Flelds Print 1 • Save х R-Mouse-Click > Delete Record. Select a Record. Rec-Data is visible in the Input-Fields. * = present in Master CallSign dBase Read the [H]elp 346 Distance is indicated if the Spotter Locator is present. Distance Km Master Spotter -Editable: Spotter, Band, Mode, Transmission Type, Name, Comment, C/Q Spotter Band When you Edit or Modify it is suggested to open the: Mode Date dBMaster CallSign dBase (F6). Both are connected.

dBMaster: Open the "Country" view.

Name

Transmission Type

Not in dBMaster

Read the [H]elp

Edit / Modify LogData / Search

Open > (F4) > Log Entry > Modify / Edit Log

Modify / Edit Log-Data

ADI/ADIF

DL7AT	04/11/2020 21:04:40	80m		3728.00	LSB		CW		907	•		Comment / CQ Contest	QsIMs	g	
		80m	~		LSB	~	CW	~	Andreas		Name	Q ~ C	/Q		
Spotter	Utc Date Time		Band	Frequency	Mode		Transm. Type	[Distance Km	Master	Name	Comme	nt	c/	Q
9A1AA	16/10/2020 14:0	05:23	40m	7013	.50 CW		CW	507	*	Ivo	14		-	С	^
9A5M	29/09/2020 04:0	03:40	80m	3510	.00 CW		CW	520	*	-			-	C	
DJ5PM	18/10/2020 20:5	50:12	80m	3597	.00 USB		RTTY	872	*	Horst					
DK8VD	12/10/2020 22:2	22:51	80m	3556	.70 CW		CW	621	*	Dieter					
DL2ASG	05/10/2020 00:2	29:26	80m	3558	.20 CW		CW	607	*	Martin					
DL6DH	18/10/2020 21:1	18:11	80m	3590	.00 USB		RTTY	681	*	Henning					
DL6SFR	18/10/2020 22:1	10:24	80m	3595	.50 USB		RTTY	414	*	Steffen					
DL7AT	04/11/2020 21:0	04:40	80m	3728	.00 LSB		CW	907	*	Andreas	ŝ.	CQ Con	test	Q	
DO1RTH	05/10/2020 01:3	32:10	80m	3520	.00 CW		CW	576	*	Christoph	1				
DOGRV	12/10/2020 22:5	53:04	80m	3556	.70 CW		CW	324	*	Stephan					
E77A	29/09/2020 04:4	4:22	80m	3511	.50 CW		CW	491	*	Slaven					
EI2JD	18/10/2020 22:0	01:07	80m	3595	.50 USB		RTTY	1594	*	Thos					
F4EGA	18/10/2020 22:1	16:14	80m	3595	.50 USB		RTTY	845	*	Patrik					
F4HER	18/10/2020 21:2	21:31	80m	3590	.00 USB		RTTY	909	*	Philippe	2				~
E 42	Print 1 Search by: Spott	er		• H	Search					Save	н	lear Flelds	x		

Search is using 7 [search-by] data selections.
'Date' + '[x] by Date' opens the Date-Picker. Select.
[Search by:]-Date is searching by one Date only.
[x] by Date + [Search by]-different is searching x 2 Data items: Example: Mode (USB) search within a Date-Period. From 03/10/2020 to 27/09/2020 (inverted) is accepted.

Select/Click a Record. Rec is **copied** into the Input-Fields. Search is considering **'Search by'** + the related **Field Value**. Search x Spotter: Full CallSign or partial.

Select a Rec or Input a single data into the Rec/Data-Fields. [Search by:] >>> [Search]



Edit / Modify LogData / Search / Print

Modify / Edit L	.og-Data			Open	> (F4) > Lo	a Ent	trv > Modi	fv / Edit Loo	a							
ADI/ADIF					()	0	, ,	· · ·								
													Comment /	QsIMs	3	
	04/11/2020 21:04:4	40 8	0m	3728.00	LSB		CW			907			CQ Contest			
		80m	1 ×		LSB	~	CW		~	Andreas		Name	Q ~ C	/Q		
Spotter	Utc Date Time		Band	Frequency	Mode		Transm.	Туре	D	istance Km	Master I	Name	Commer	nt	C/(2
9A1AA	16/10/2020	14:05:23	3 40m	7013	.50 CW			CW	507	*	Ivo			-	C /	~
9A5M	29/09/2020	04:03:40) 80m	3510	.00 CW			CW	520	*	-			-	С	
DJ5PM	18/10/2020	20:50:12	2 80m	2507	OO HER			DUUU	970	*	Horst					
DK8AD	12/10/2020	22:22:51	L 80m	📑 🗹 By	Spotter	B	y Date	Sorted	RF	0 *	Dieter					
DL2ASG	05/10/2020	00:29:20	5 80m							*	Martin					
DL6DH	18/10/2020	21:18:11	L 80m	From R	ecord >>>	101	Record			*	Henning					
DL6SFR	18/10/2020	22:10:24	4 80m		1		42			*	Steffen					
DL7AT	04/11/2020	21:04:40) 80m							*	Andreas		CQ Con	test	Q	
DO1RTH	05/10/2020	01:32:10	0 80m							* 0	hristoph					
DO6RV	12/10/2020	22:53:04	4 80m		-					*	Stephan					
E77A	29/09/2020	04:44:22	2 80m	B	crt			H	t Z	*	Slaven					
EI2JD	18/10/2020	22:01:07	780m							*	Thos					
F4EGA	18/10/2020	22:16:14	4 80m	3595	.50 USB			RTTY	845	*	Patrik					
F4HER	18/10/2020	21:21:31	L 80m	3590	.00 USB			RTTY	909	*	Philippe				4	1
E 42	Print 1 Search by:	Spotter		• H	Search						Save	н	Clear Flelds	x		

Read the [H]elp

Printing the Log-File and Search results.

Choose [x]-bySpotter (Default) or []-ByDate, [x]-Sorted (Default).

By Spotter or By Date is exchanging the first 2 columns.

Spotter | DateTime or DateTime | Spotter.

Printing is creating the file "logprint.txt" including all Records or only the Search-Result.

Click on the [Open File]-Button. Preview or print it > next page.

Use your own Editor and Printer System. Format A4 "Landscape", Font: Bold, Points: 10.

It is suggested to open the dBMaster CallSign dBase (F6). Both are connected.

Next >>>

3/5

Edit / Modify LogData / Search + Print Panel [Print 1]



Default = [x] Sorted. Valid x Search + Printing.



Search by: Spotter With the Spotter Input-Field empty Search is selecting the whole dBase.

18/10/2020		80m	1	3556.70		CV	v		CW				
ottobre 2020		80m	~			USB		~	RTTY	,			~
Utc Date Time			Band	Freque	ncy	N	lode		Tra	nsm. Type	e Dis	tance	Km
18/10/2020	20:5	0:12	80m		3597	.00 (JSB			RTT	ſΥ		872
18/10/2020	21:1	8:11	80m		3590	.00 (JSB			RTT	Ϋ́		681
18/10/2020	22:1	0:24	90m		2505	50 T	TC D			דיייינד	v		414
18/10/2020	22:0	1:07	-	By Spot	ter		By Da	te	\sim	Sorted	RI	-0 <u>1</u>	.594
18/10/2020	22:1	6:14											845
18/10/2020	21:2	1:31	Fro	m Date	>	>>	To Date						909
18/10/2020	21:5	3:11											19
18/10/2020	21:0	3:36											872
18/10/2020	20:5	3:10											393
18/10/2020	21:2	9:21	_ _	F . a			-	1	_			1	492
18/10/2020	20:3	4:41		Exit		Ope	n File		H	Print	2		951
18/10/2020	21:2	4:17									-	3	584
18/10/2020	21:0	7:46	80m		3595	.50 (JSB			RTT	ſΥ		263
18/10/2020	21:0	0:24	80m		3595	.50 (JSB			RTT	Ϋ́	1	.144
	Date				U	Sa	arch .	Evit o	earch			Sau	0
Search by	Date			1	п	000		Exit S	earch			Jav	0

Search by [Date]. Only x 1 Date | From Date .. To Date not active.

Search by: [Band] or else (not Date) + [x] By Date | Search on 2 Data. By Band (80m) selected + by Date From 16/10/2020 to 18/10/2020.

2020		Om	\sim	U	SB	\sim	RTTY		~
Date Time		Bar	nd Frequ	lency	Mode		Trans	sm. Type	Distance Km
10/2020	20:50:	12 80	m	3597.0	0 USB			RTTY	872
10/2020	21:18:	11 80	m	3590.0	O USB			RTTY	681
10/2020	22:10:	24	-	2505 5	O TICE			τυπάλ	414
10/2020	22:01:	07 🔼	📃 By Sp	otter	🗹 By D	ate	∽ So	orted	RFO 1594
10/2020	22:16:	14							845
10/2020	21:21:	31	From Date	>>>	 To Date 	e			909
10/2020	21:03:	36	16/10	/2020	18/	10/20	20	2	872
10/2020	20:53:	10							393
10/2020	21:29:	21						Nr of da	ys 1492
10/2020	20:34:	41			· · ·	-	P		951
10/2020	21:24:	17	Exit		Open File		H	Print 2	3584
10/2020	21:07:	46 00							263
10/2020	21:00:	24 80	m	3595.5	50 USB			RTTY	1144
10/2020	23:20:	49 80	m	3595.4	12 USB			RTTY	738
Search by:	Band		-	H	Search	Exit sea	arch		Save

PRINTING [Print 2]

- (1) The inverted Date Input is accepted.
- (2) By Spotter or By Date is exchanging the first 2 columns. Spotter | DateTime or DateTime | Spotter.
- The [x]By Date has 2 different uses. Search + Print.

[Print 1] is opening + closing the Print Panel.



4/5

Edit / Modify LogData / Menu [ADI/ADIF] Upload Adi File



eQslArchive.adi - Blocco note di Windows

File Modifica Formato Visualizza ?
File: eQslArchive.adi
<ADIF_VER:5>2.2.7
<PROGRAMID:10>RFRScanner
<PROGRAMUE:S>1.0.6
<EOH>
<QSO_DATE:8>20201016<TIME_ON:4>1405<CALL:5>9A1AA<FREQ:8>7.013500<BAND:3>40m<MODE:2>CW<MY_GRIDSQUARE:6>JN55WJ<MY_CITY:6>Padova<DISTANCE:3>507<EOR>
<QSO_DATE:8>20200929<TIME_ON:4>0403<CALL:4>9A5M<FREQ:8>3.510000<BAND:3>80m<MODE:2>CW<MY_GRIDSQUARE:6>JN55WJ<MY_CITY:6>Padova<DISTANCE:3>507<EOR>
<QSO_DATE:8>20201018<TIME_ON:4>0403<CALL:4>9A5M<FREQ:8>3.510000<BAND:3>80m<MODE:2>CW<MY_GRIDSQUARE:6>JN55WJ<MY_CITY:6>Padova<DISTANCE:3>520<EOR>
<QSO_DATE:8>20201018<TIME_ON:4>2050<CALL:5>DJ5PM<FREQ:8>3.597000<BAND:3>80m<MODE:4>RTTY<MY_GRIDSQUARE:6>JN55WJ<MY_CITY:6>Padova<DISTANCE:3>872<EOR>

FileName is always requested without extension. Optional Fields can be added and the Checkbox x each Field must be Checked. [Save Configuration] Save your data for the next Session. [Print ADI File] create the File.

You can Filter and search x several different Results. By Mode, Mode + Date, by Transmission Type; From..To ecc... Use [Search] and get the Search-Result List. Check the List if it contains what you need. Modify / Edit Log-Data

ADI/ADIF

Open Last ADI File

Start the [Print ADI File]

Fldigi Frequency exchange Semiautomatic

RFR	Scanner x86 v.	1.0.0 (fw 3.5)		—		×		
lcom	Rigs saved	TCP OmniRig	Rec Freq FFT Op	otions Help A	About			
	10-27	_		Shor	rtCuts			fldigi frequency exchange
	16-27	DUOr-A (Ri	.g)	fldig	ji Frequency	/ Exchang	je	Freq Off >> X
(Open Port	Scan Frequer	ncies to	OmniRig	g Off-Lin	e		
P	ort Data ort	7000	X 7050	тср	RX1			
C	:OM1 ~	Step	Delay mse	ec H 16	(752) <mark>S</mark>	top		
Ba	aud Rate	Step 1 KHz	~ 300	Com-Po	rt: Off			
Pa N	arity lone v		🗌 int 🛛 I	H DUO/D	UOr: <mark>On</mark>			
S	top Bits	C	Start	H RIG: DU	JOr-A			
0)ne v		_	TCP				
8	ata Bits	-	3.511,00	c Manual R	Frequency inp	put		
8	0m ~	CFO	000003511000;	Send	Display	y		



Fldigi Audio history and "casual tuning"

You can temporarily "monitor" a different signal by right-clicking on it.

As long as you hold the mouse button down, the signal under it will be decoded;

as soon as you release the mouse, decoding will revert to the previously tuned spot (where the red marks are).

If you also hold the Control key down before right-clicking, Fldigi will first decode all of its buffered audio at that frequency.

Database Converter

*.txt, cvs, eibi ecc... are allText Files, extract + position any field create a new database for your application convert and translate to *.xml for the Elad SW2 test: connect to your Rig using OmniRig

Tested, ILG db with +30000 Records

The ...\Work Folder\.... is including 4 example dBase files with explanation x by_Position and by_Delimiter database.

RFR	Converter x	<86 v. 1.0.	0 (fw 3.5) - (Copyright by Ra	aimund Fo	rstmeier, Padova/Italy		Menu	> Help > Cor	nnect a RF	RSc	anner dBase		- 🗆 X
Transla	te x Elad	Save	OmniRig	Field Position	h Help	About		Local	Converter H	elp > Read	the	[H]elp		
Frequ	ency		Station		Time	Transmission Data	Place		Transmit >>>	> (EU AF)		Country Transmission	type	
2.	12.01 E	BCY (T)	horp Boi	se C			BCY (Thorp	Boise City, O	K)		U	5		^
2	12.01 E	BCY (T)	norp Boi	se C			BCY (Thorp	Boise City, O	K)		U	5		
Sere	CC Read	DY DELL	miter or	by-rosicion	10			Ac	tual Field Pos:	94 / 1				Your
•	Field Div	visor(.	_ space (ecc)		Your Reco	ord Fields					Local Fields Translate	ed. Field Length	MaxLe, Le, distance
			H			28230		Fre	quency		1	28230.00	10	10,9,2
•	By Positi	ions	Local Field			IQ8CZ (Catanzaro)		Sta	tion		2	IQ8CZ (Catanzaro)	22	22,22,2
	6,1	13	1					fror	n Time to (Default 0000-24	00)	3		9	9,9,2
	22,4	41	2					Tra	nsmission Data		4		16	16,16,2
	81,9	92	3											
			4			IQ8CZ (Catanzaro)		Pla	ce		5	IQ8CZ (Catanzaro)	32	32,32,2
	22,5	52	5					Tra	nsmit to >>> (EU AF)		6		20	20,20,2
			6						under a		_			20.20.2
	18,2	21	7						andy		'		20	20,20,2
H			8					Tra	nsmission Type		8 H	Editable. x 1 single Record only or ALL.	20	20,20,2
	х						X					Add Trar	ns-Mode (8)	Default X
Rec_L	ength:	145				Convert Frequen	cy NO DEC Separ	rator Te	st Record Field N°	1		Divisor	×	
171 171	.0001 MR	IC Medi 1 (Nador (LW))		00	00-2400 [171.0	20120205							
Field	Pos: 13	6 Op	en > ease	e\Work Folder\M	1W.txt <>	Select your dB File		Save Session	< FileName MW_Co	omplete	>	Load Session Test	Translate	Save
2	19.00 W	W7 (Pa)	ook du R	oche			W7 (Pabok d	du Rocher-Perc	e, QC		C.	A		~
0								Input FileName				H Translate "Mode-	Type" to RIG-Mode	CLOSE

The dBase Converter, 'Converter.exe' is in Sub Directory Program Path...\Converter. Create a connection to your Desktop. Next >>>

1/2



Close Port

A

Scan Frequencies

Click > Refresh Com-Ports. Check your ComPort Emulator, VSPE ecc... Open your Radio.

Virtual Com-Ports VSPE

With the ELAD SW2 connected you can use the VSPE just with COM10...COM12 ... Example: FDM-SW2 Serial Port >COM10 + fldigi COM11 Open the SW2. The ELAD Samplers driver must be visible in your "Device Manager" View.

🗞 Virtual Serial Ports Emulator (Emulation started)		– 🗆 X
File View Language Emulation Device Help		
🖻 🖬 💽 = 🐂 🐂 🛰 🇞 🌄 🕄	•	
Title	Device	Status
COM10	Connector	ОК
COM12	Connector	OK
COM10 => COM11	Splitter	Ready
COM12 => COM13	Splitter	Ready
COM3 => COM1	Splitter	Ready

Avoid common troubleshooting

Make sure that all connected devices are set with the same parameters. Com-Port, Baud Rate and Rig where requested like fldigi, CWSkimmer, HRD.

VSPE should be closed and Re-Opened after Com-Port changes. Close your Rig and Re-Open it.

Don't forget the right Audio Settings.

If you use HRD, HRD must always be opened first. HRD does not connect if a device is already in use. Now you can open the RFRScanner Com-Port.

Open Port

[Re]fresh (reload) Com-Ports after any ComPort changes.

Using

fldigi CWSkimmer HAM Radio Deluxe other...

- Check and set the right Parameters. Avoid unnecessary complaints.
 - Rig
 - Device Com-Port
 - Baud Rate
 - Audio Capture and Playback

fldigi: you can use the RFRScanner "fldigi exchange frequency".

CWSkimmer: Menu [Options] open SWSkimmer in automatic.

HRD: Always open HRD "first" then other programs. HRD is not connecting to Com-Port ecc... if a device is already in use.

VSPE: Virtual Com-Port emulator

VAC: Virtual Audio Cable

RFRScanner is setting the Baud Rate in automatic

- Icom 19200 default (the included Icom Rig's hard coded) Menu [Icom]
- All saved Rig's (Rig-Editor) are set to the Baud Rate you indicate/input.

RFRScanner

ShortCuts

×	
F3 = open the Recorder.	
F4 = open the dBase Frequency List.	
F5 = open the "Rig Command" Editor.	
F6 = open the "dBMaster Callsign" View.	
F7 = Save Frequency. dBase List (F4) must be open.	
F8 = Analyzer. Fix the FFT Image. Else > F8: Open the A	nalyzer if t
F9 = open the "TCP" View.	
F11 = open the "Select SW2 RX1RX4" View.	
[ESC] (or different) Activate / Pause the Audio Recorder.	
R-Mouse-Click - Delete Item in various dBase-View-Lists.	
ОК	4

Intrasystem RFRScanner version 1.1.2 OKT/2022

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The BackGround View – 4 colors

RFRScanner Menu > Options > Select BackGround



The specific Help.

RFRScanner Menu > Help

Help-Info PopUp: You can Re-Size and change the character Size.

Troubleshooting with: Adobe Acrobat Reader *.pdf

RFRScanner Menu > Help > RFRScanner.pdf

Remember: Any open error is a internal conflict between Adobe Reader and Windows.

My suggestion is: Reboot

Adobe explanations:

https://helpx.adobe.com/acrobat/kb/failed-to-connect-to-dde-server.html