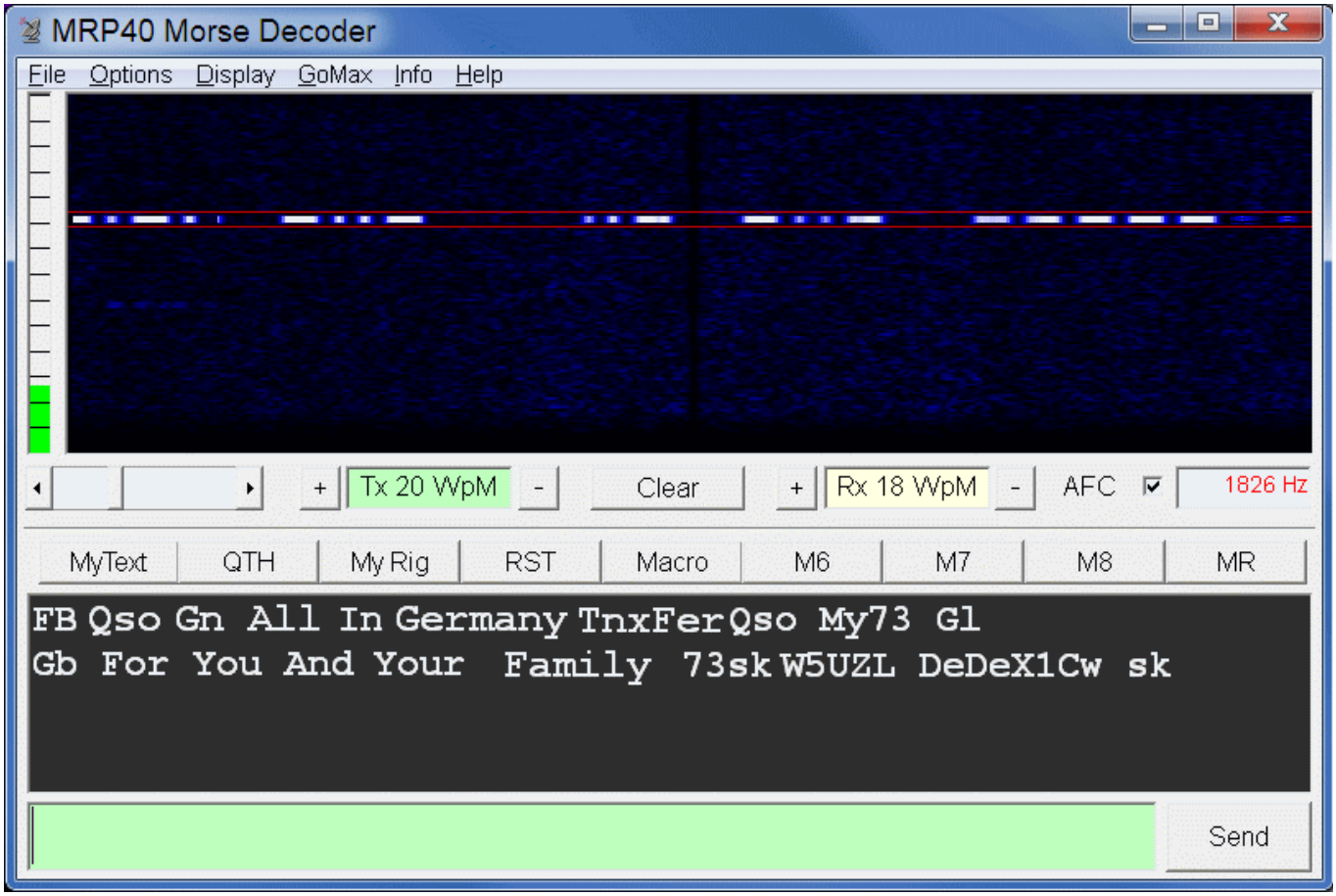
MRP40 is a **M**orse **R**eceive- and transmit **P**rogram.

The program is a powerful and highly-effective amateur radio software that decodes Morse Code audio signals that have been fed to a computer sound card. The decoded text is displayed on the computer monitor. For transmitting Morse code, the program encodes keystrokes from the computer keyboard. Radio amateurs use MRP40 to send and read Morse singnals. It can read very weak signals and decodes with excellent accuracy. It makes you score in CW contest. With MRP40 you are number one on air!

For more information please visit the MRP40 Homepage!

Screen Shot

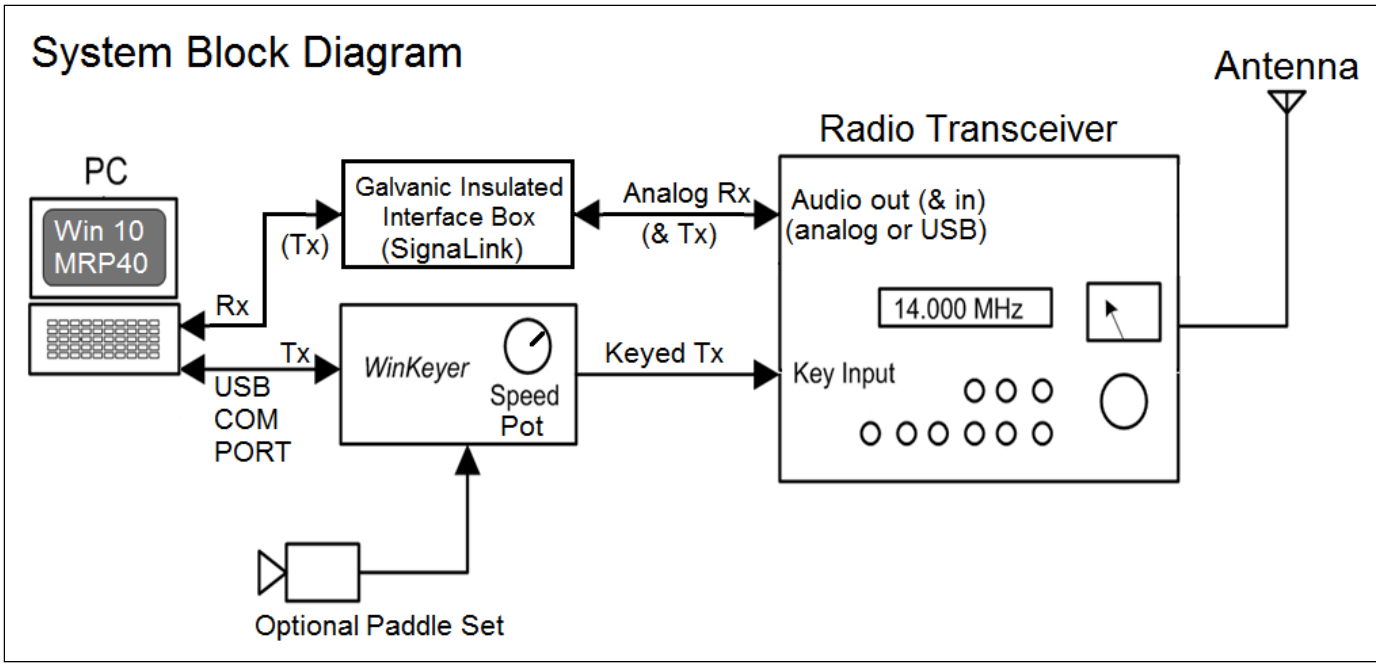


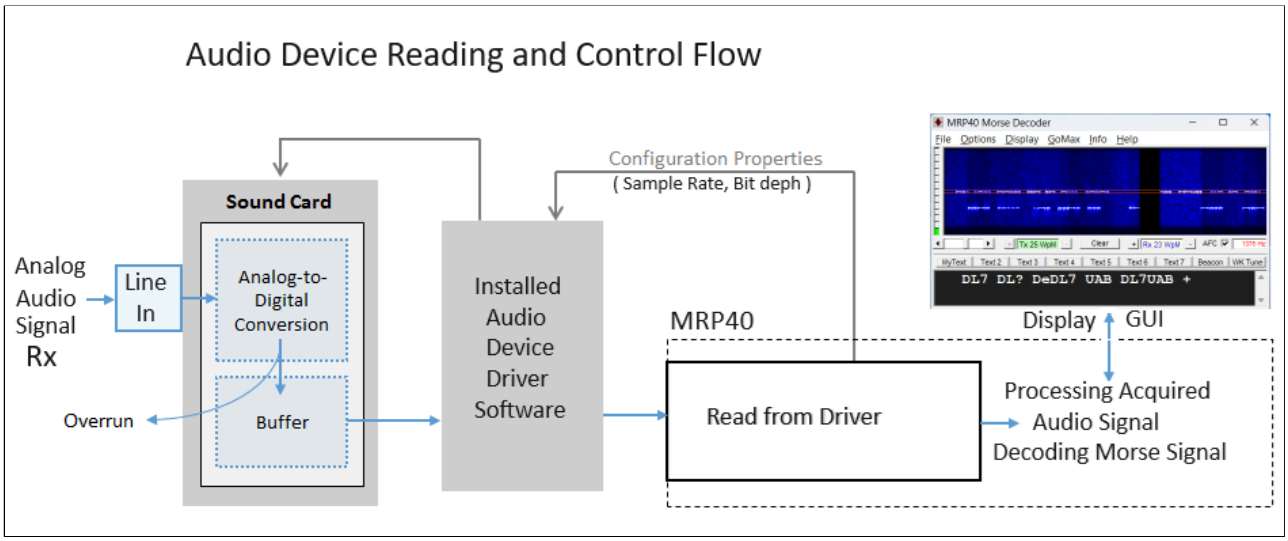
System Requirements:

Operating System
- Windows 7, 8, 10, 11
- please run the downloaded Setup with administrator rights

Sound Device (soundcard) for Rx audio input and (optional) Tx audio output:
- Usual standard sound device on mother-board OR
- Sound device inside transceiver OR
- Interface box with sound chip, connected via USB

COM-Port for Key and PTT control:
- RS232 Port (native) OR
- USB Port with external Adapter to RS232 (can also be inside transceiver or interface box)





Download MRP40

To download a full functional MRP40 click here!

Purchase MRP40

MRP40 is shareware. This means that you can try the program before buy.

You can try the program for 30 days.

If you want to continue to use the program, then you want to purchase a key to unlock it.

You can buy the key online.

Contact info

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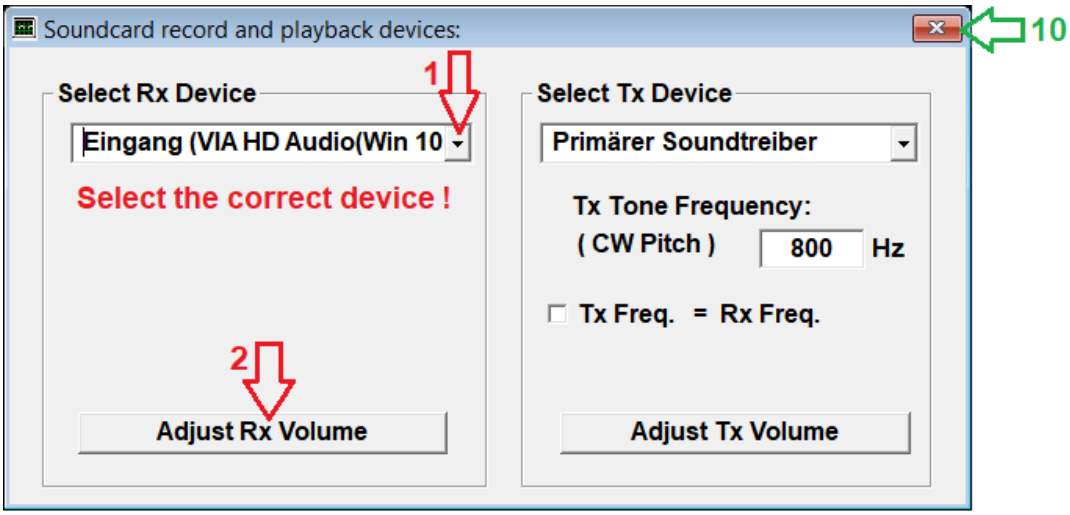
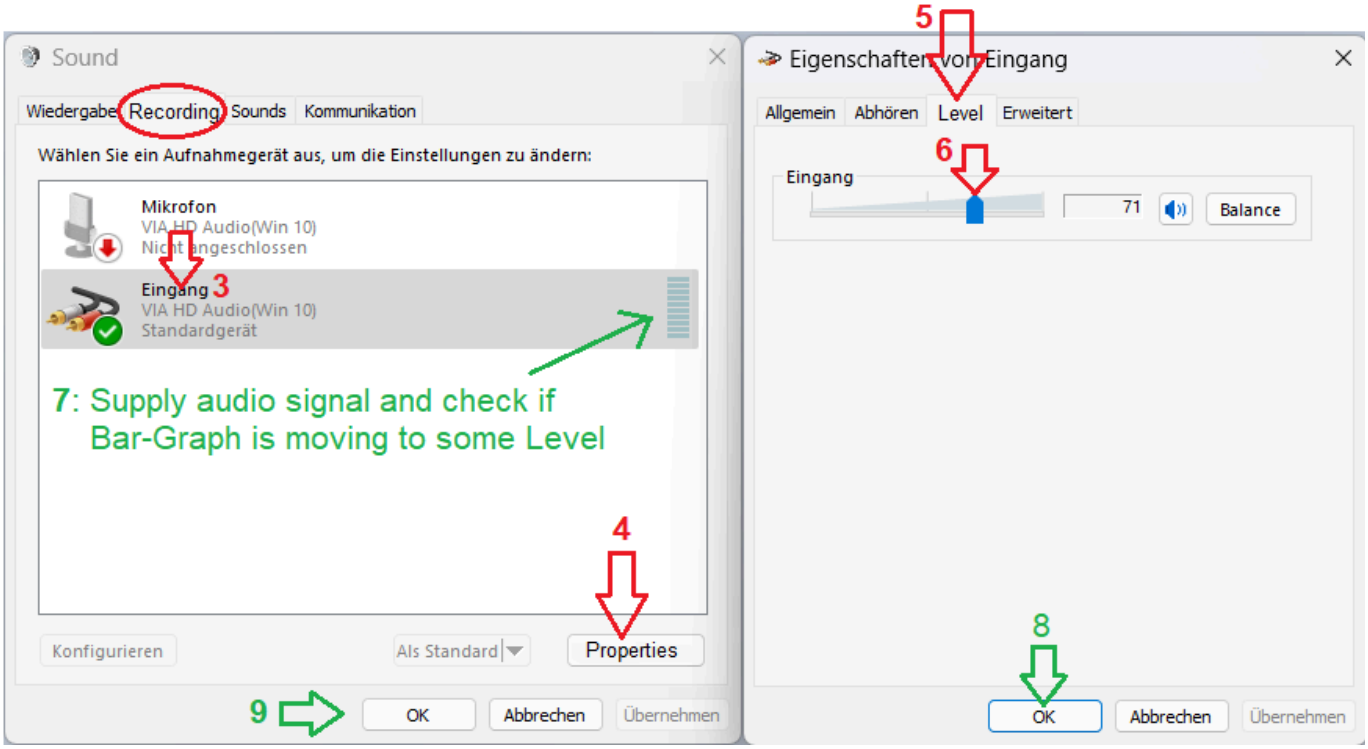
Getting Started

Receive Morse:

Feed radio audio signal into the computer. Plug an audio (or USB) cable into the
- Line input jack
- Microphone jack or
- USB port

Run MRP40 click on -Options -View -Soundcard
A window will come up like image shown below
Step by Step click the items indicated by the numbered red arrows.





Please read further instructions to set the right Audio Volume, click here!

When Volume setting is finished then feed MRP40 with reasonable Morse tone signals. Immediately you will see the dots and dashes on the Audio Band Display. Point with your mouse on that "Morse print" and click, immediately the two red lines will be placed there. The two red lines represent the center frequency and band width of the CW filter of MRP40. Fine tuning of center frequency will be

done by MRP40 automatically. (AFC) The center frequency is displayed on the left side: xxxx Hz (red)

Remark: When AFC is switched OFF then you can "fine-adjust" the center Frequency of CW filter by clicking into the Audio Band Display, hold the left mouse key down then shift the mouse, the movement relative to the red lines is transformed 1/10, while moving mouse watch on left side the center frequency xxxx Hz (red) This was designed to enable a real "Fine Adjustment"

You may estimate the speed of the incoming Morse signal, then set the "Rx---WpM" roughly to the estimated speed by clicking "+" or "-" button quickly MRP40 will "tune" to the exact Rx speed automatically. Immediately the decoded text will be displayed

Rapid Capture: You have received a QSO text, now you want to copy the call sign of the other OM into your Log Book Program: Just point the mouse to the part of text you want to copy, press left mouse button and select the desired part of text. Rapidly in the moment you let mouse button up, the selected text is copied to clipboard. Now you can paste the text to your Log Book.

TO ZERO BEAT THE OTHER STATION:
If you want to transmit on the frequency of the station you are listening to, then move the parallel red lines up or down so that frequency that shows up in the little window on right side of the screen shows the CW offset frequency of your receiver. Then turn the MRP40 AFC off so that the parallel red lines don't move all over the screen as you tune to different stations. Now tune in a station you want to work so that black dot and dash bars are moving between the red lines.

For example the offset on Kenwood TS-850 is set for 600 Hz. So you move the red lines up or down until the readout in the lower right window reads 600 Hz (or very close to it). Now, when you go to transmit you will be in "zero-beat" with the station to which you are listening. If you don't do this, you will be transmitting on a different frequency than the other station.

WORKING DX PILEUPS:
In Pile up situation you can see on the MRP screen that other stations are calling the DX station. Here are two strategies for using the MRP40 screen.

(1) You can find and see the station that just caught the DX station, tune your second VFO to that frequency and call the DX as soon as the calling station finishes the QSO.

(2) You can also see where there might be a "hole" between calling stations and you can set your second VFO there.

Send Morse:

Start MRP40, click menu -Options -TxSettings choose:
-Send via COM Port or
-Send via Soundcard or
-Send via WinKeyer

Click menu -Options -TxSettings -**Use Send Button**

Click menu -Options -Show Interface-Plan to see how to connect (USB) COM Port with your transceiver.

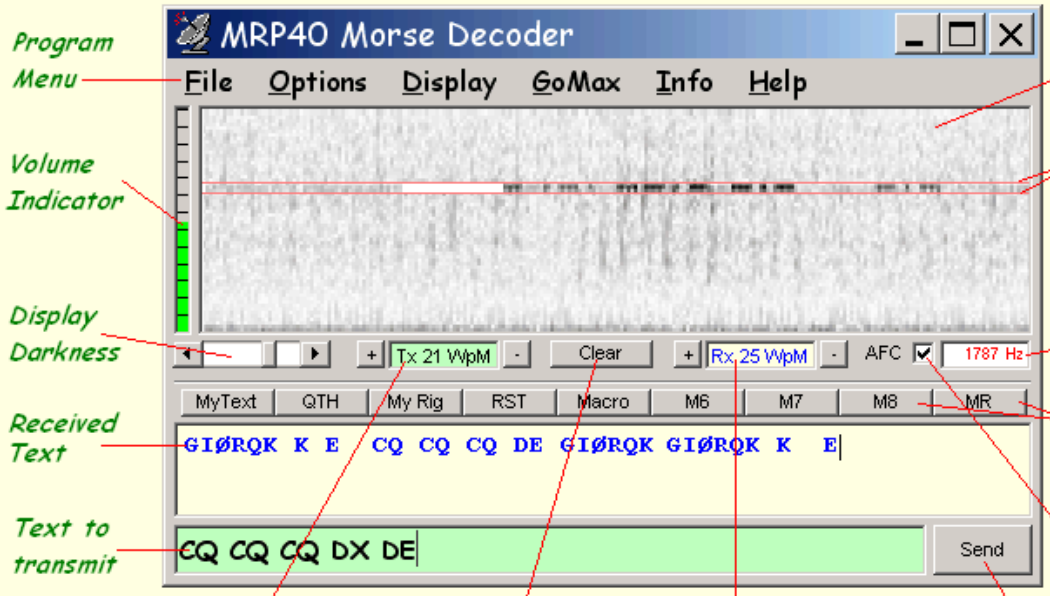
Type your message into the lower green text box.

There are 8 Buttons in a row which allow you to send pre defined text from file.

To define a new text just point with the mouse on a button and click RIGHT mouse key. Immediately a text window will appear and you can type your text there.

Set the Tx --WpM speed by clicking on related "+" or "-" button

User Interface Overview



Program Menu

Volume Indicator

Display Darkness

Received Text

Text to transmit

Graphical Audio Display

Audio Signal being filtered and decoded

Audio Signal Frequency

Buttons to Send Text from a File

Automatic Frequency Control (Auto Tune)

Send Button

TX- Speed Background is red during sending (PTT active)

Clear Display Stop Sending Stamp Logfile

RX Speed Click to Lock Speed Background is grey if locked

Keyboard Shortcuts

F3 triggers the "GoToMax" function and forces the program (one time) to select the recently strongest signal in the recieved audio spectrum for decoding.

Alt+g "GoToMax" (same function)

F5 Toggle AFC on-off (automatic ferquency control / fine tuning)

Ctrl+F9 Toggle WinKey Tune function

Ctrl+F1,F2,F3,F4,F5,F6,F7,F8 Sent individual text, from the pre-defined memory buttons of MRP40

Enter Start sending (via COMx Port, OR via Sondcard)
Only available when Tx Option "Use Send &Button (TX type ahead mode)" is enabled
Not available with WinKey

ESC Stop sending and clear the Tx text

Alt+F opens the File menu

Alt+O opens the Options menu

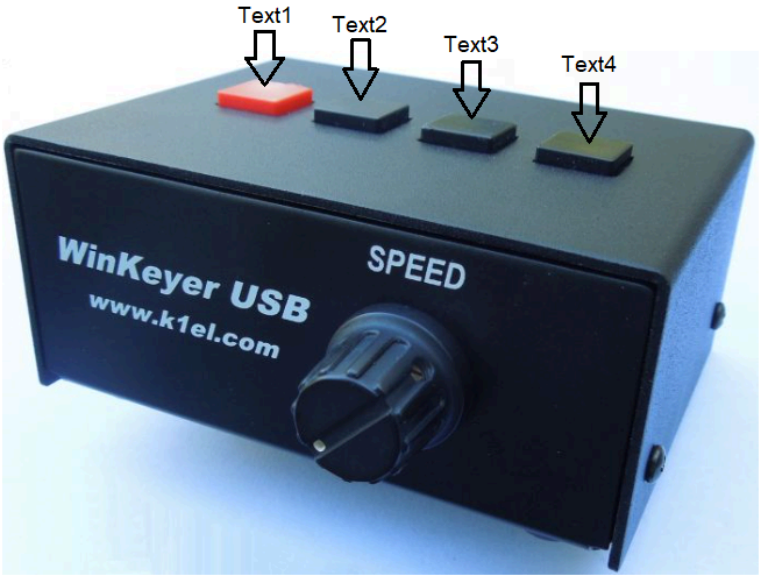
Alt+D opens the Display menu

Alt+G triggers the GoMax Function

Alt+I opens the Info menu

Alt+H opens the Help menu

Via the WinKeyer buttons it is also possible to sent text, from the pre-defined memory buttons of MRP40


Text1
Text2
Text3
Text4
WinKeyer USB
www.k1el.com
SPEED

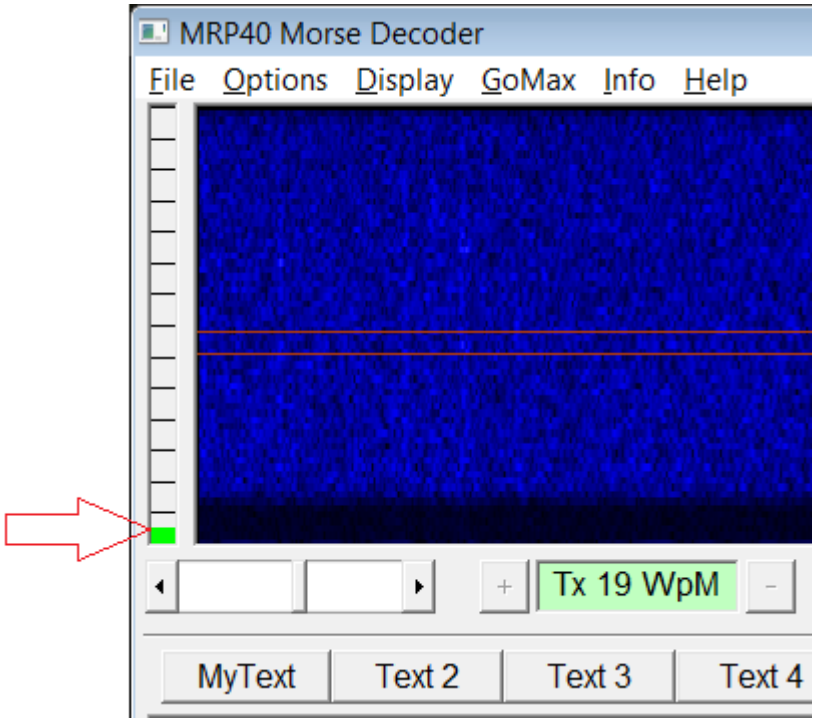
Audio Volume

Please adjust your Rx audio level this way:

- On your radio set the Rx audio band-with to 2.4kHz (USB or LSB)

- Go for example to 40 meter band and find a frequency where is not any signal and "feed" MRP40 with pure noise while not any CW or SSB signal and no atmospheric spikes are pesent.

- Adjust the volume of audio from your radio to a level so that MRP40's green volume bar will display just half of one single scale-tick-mark see image:



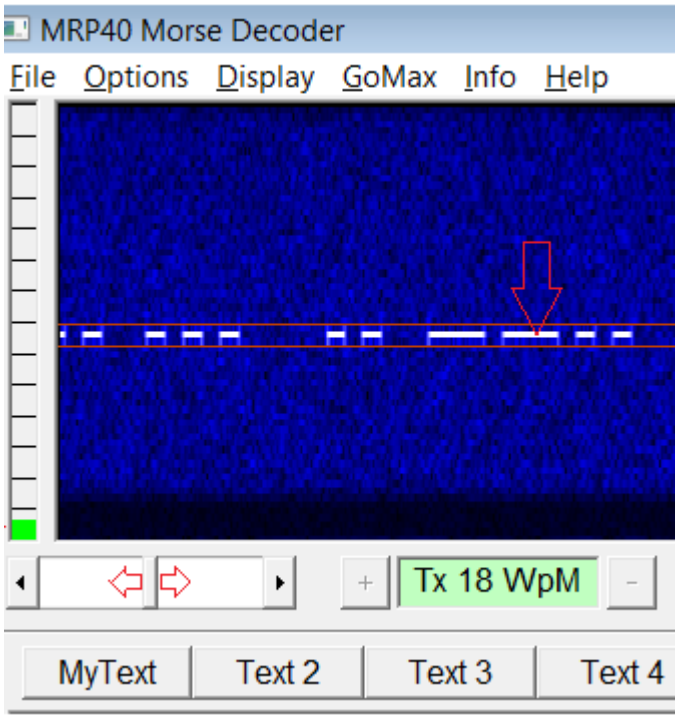
- Now tune in to an active CW-Station.

- Adjust the position of the horizontal slider so that the selected CW Station prints out as white colored dots and dashes.

- If the color tends to be more red then reduce the horizontal slider till it gets white

- If the color tends to be more blue then increase the horizontal slider till it gets white

See image:



Horizontal Slider

The best position of the horizontal slider is found when the selected incomming CW Station is printed as white dots and dashes.

If the horizontal slider psition is middle then it can compensate volume for -20dB to the left side and +20dB to the right side

Very strong incoming signals might require to be compensated with the -20dB position on the left

Very weak incoming signals might require to be compensated with the +20dB position on the right

MRP40 is very forgiving regarding the position of the horizontal slider.

It still works quite good when signal color turns to blue or red.

But the very top of decoding performance is reached when signal is printed as white dots and dashes.

Automatic Gain Control on your Transceiver (AGC)

MRP40 has an own build in AGC that is highly effective compensateing all kinds of amplitude variations of incoming signal. In some situations it can be of dis-advantage if the AGC of the Trensceiver is active! Here you have to distinguish between two cases:

1) If you operate your Transceiver in SSB-Mode with an audio band width

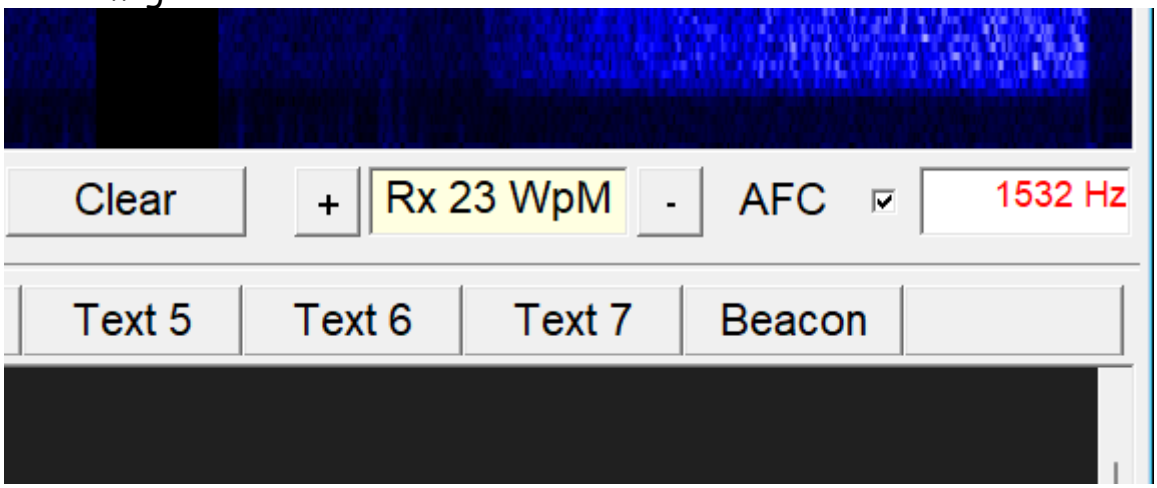
of for example 2500Hz, then make sure to switch the AGC of Transceiver **OFF** otherwise strong "neighbour" CW signals force the AGC to serverely intermodulate the amplitude of the station you are recently trying to decode with MRP40.

2) If you operate your Transceiver in CW-Mode with a small audio band width, for example 400Hz, where only one CW signal is comming in, then you can let the Transceiver AGC switched **ON**

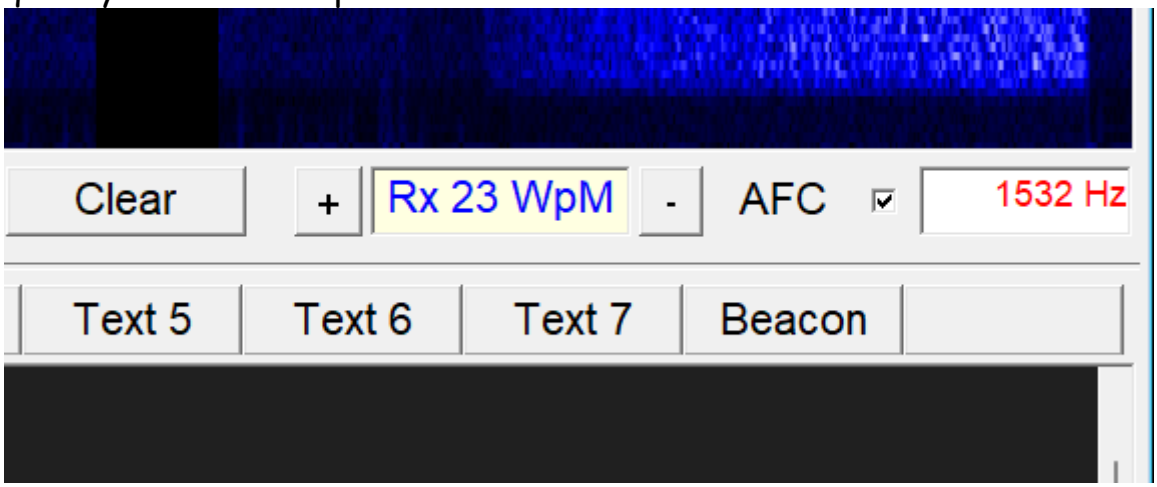
Special Functions

Rx Speed tracking [Rx..WpM]

MRP40 automatically detects the Rx speed of the incoming morse signal. This is essential to get best decoding results. Normally it takes only a few seconds until the Rx speed is detected. As long as the Rx speed is not jet detected you can help MRP40 by adjusting the speed (on best guess) manually by clicking the related "+" and "-" button. During this time the text-color of "Rx..WpM" is black; indicating that it is not jet detected and not jet automatically adapted. See Image:



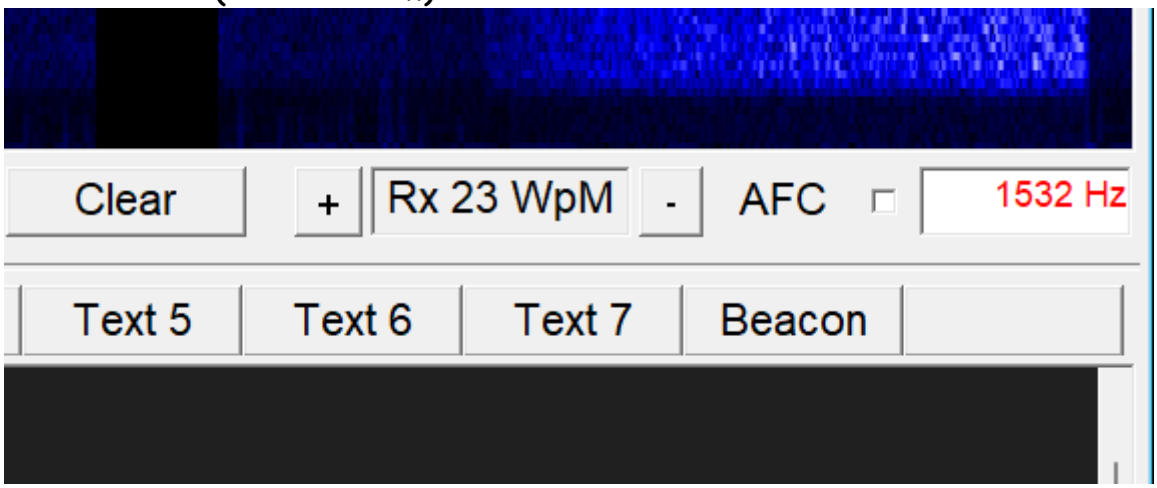
As soon the speed is detected the Rx..WpM is updated and the text-color turns to blue; indicating that auto-adapt is ongoing. The auto-adapt function quickly tracks the speed and no more manual interaction is needed. See Image:



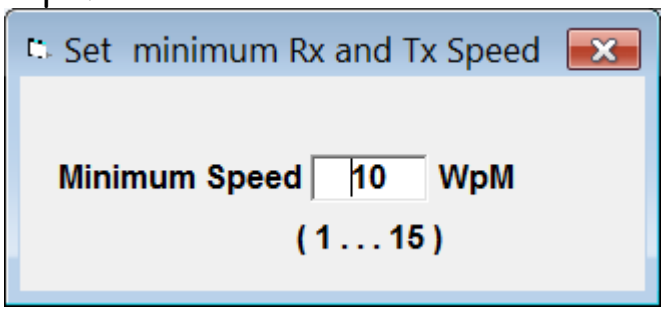
The auto-adapt function can be disabled by a click into the Rx..WpM box. The background of the Rx..WpM box turns to grey; indicating that the auto-adapt function is disabled and the decoder is advised to decode signals with that

shown speed. This mode is for example used during long term unattended monitoring of a remote beacon. In this situation the AFC is also switched off to ensure that MRP40 works on a fixed frequency. See image below and notice the grey background of Rx..WpM.

Repeated click into the Rx..WpM box will toggle between disabled (color grey) and enabled (color cream)



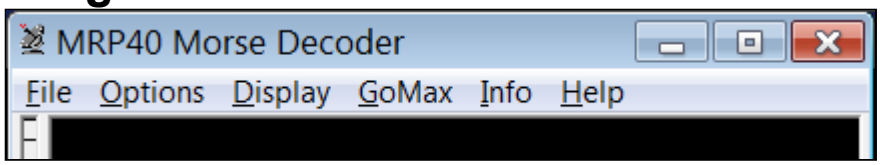
Menu: -Options -Rx Settings -Set minimum WpM Speed...
MRP40 automatically adapts his decoder to the speed of the incomming sation. In situations where MRP40 is running for a long time while no signals are present it can happen that MRP40 is trying to adapt to noise signals. This typically leads to very low speed values. If then a Morse signal with normal speed is coming in MRP40 is not able to decode because the extrem low speed setting is not applicable to the incoming signal. To avoid this situation normally a minimum speed of 10 to 15 WpM is set. If you want to operate in QRSS mode (very slow Morse code) then you can lower the Min WpM speed down to 1 WpM.



Winkeyer Text Buttons:
You can tigger the sending of (inside MRP40) pre-defined text by pressing the Buttons on the WinKeyer USB

Text1
Text2
Text3
Text4
WinKeyer USB
www.k1el.com
SPEED

Program Menu



While MRP40 is running move the pointer of mouse to one of the menu items above and perform a left-click to open the item.

Alternative you can use the keyboard to open the menu item this way:

Press keys **Alt+F** to open the **File** menu

Press keys **Alt+O** to open the **Options** menu

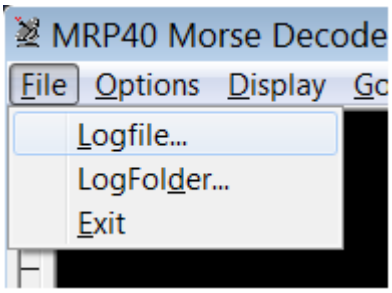
Press keys **Alt+D** to open the **Display** menu

Press **F3-key** or keys **Alt+G** to trigger the **GoMax** Function
This forces the program (one time) to select the recently strongest signal in the recieved audio spectrum for decoding.

Press keys **Alt+I** to open the **Info** menu

Press keys **Alt+H** to open the **Help** menu

File



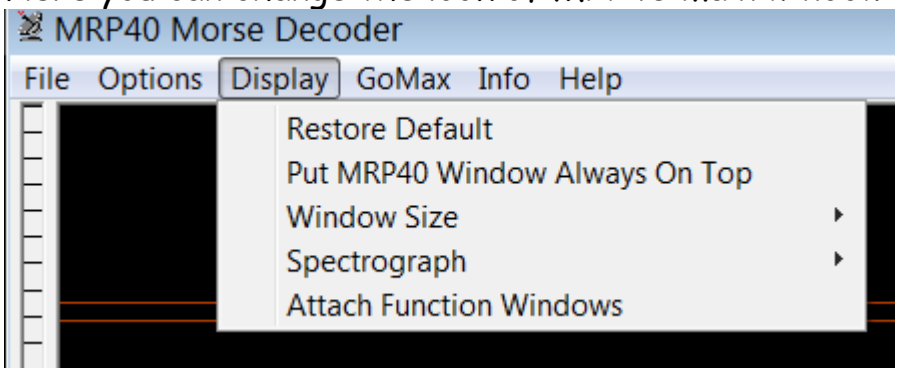
Logfile...
opens a text file where all received and send text of the day is stored

LogFolder...
opens the folder which contains all Log files. You might want to purge out the folder from time to time

Exit
closes the MRP40 program

Display

Here you can change the look of MRP40 main window



Put MRP40 Window always On Top

Ensures that no other windows will hide the MRP40 window

Restore Default

Just reset the MRP40 Window size to 640x480 Pixel and place it at the upper left corner of screen

Window Size

Select a convenient window size

Spectrograph

The Spectrograph permanently prints graphically the intensity of the incoming Audio Signals. The Spectrum is analyzed with a Fast Fourier Transformation (FFT) calculated over a certain amount of Points. The higher the number of FFT Points the slower is the printing speed. To stretch the Morse Dashes and Dots to a reasonable graphical length one may change the printing speed by changing the number of FFT Points.

Following FFT settings are available:

Fast (default setting) 128 Point FFT

Slow 256 Point FFT

Extra Slow 512 Point FFT

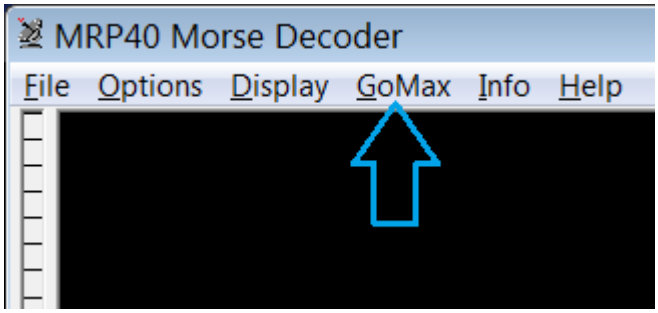
FFT Settings 64 to 8192 Point FFT
Just select any Number you are convenient with.
Numbers of 1024 or more are used when receiving QRSS signals (extreme slow Morse)

Note: The Spectrograph (FFT) Settings have absolutely NO link and NO effect to the performance of Morse-Signal filtering and decoding algorithm itself.

Attach function Windows

A number of windows appear and dock around the Main Window. This will give you a convenient overview and control to following Functions: Oscilloscope, Font-Size, Text Formatting, TX-Macro. The Mini Log Book can be lauched separately.

GoMax

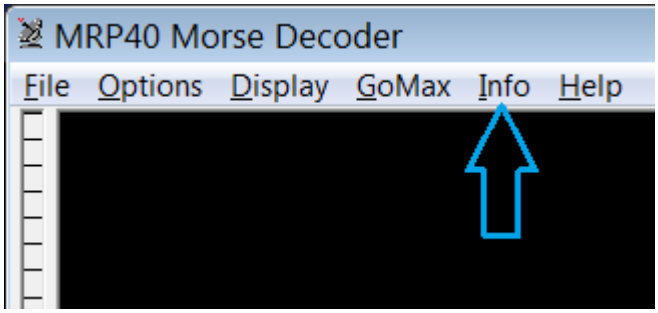


A click on GoMax triggers the program (one time) to select the recently strongest audio signal in the spectrum for decoding.
You can also Press the F3 button on your keyboard to trigger the GoMax Function.

The GoMax function can also be activated permanently:
Click -Options -Rx Settings -Auto GoMax

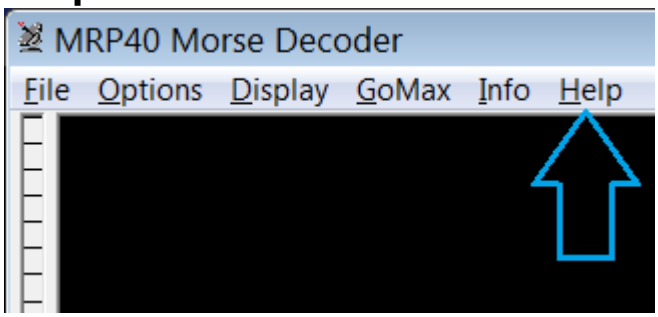
In this mode the program permanently seeks for the strongest signal in the spectrum for decoding. It is a neat function that is for example useful for unattended operation of MRP40.

Info



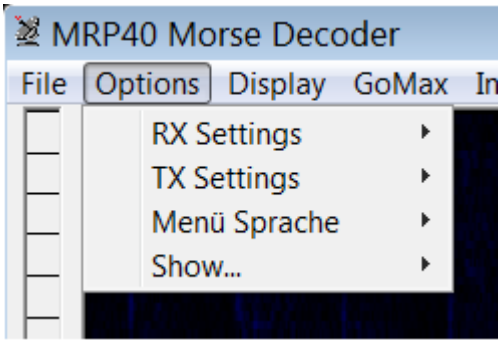
Will show the MRP40 registration number and contact information, available in English and German language.

Help



Opens the Help documentation (User Manual) available in English and German language.

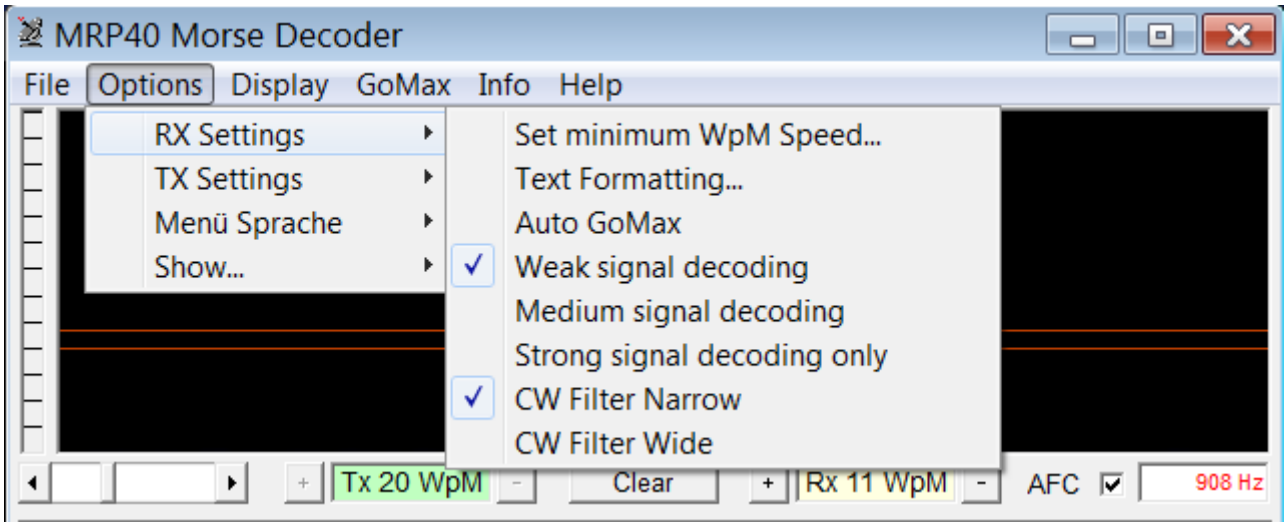
Options



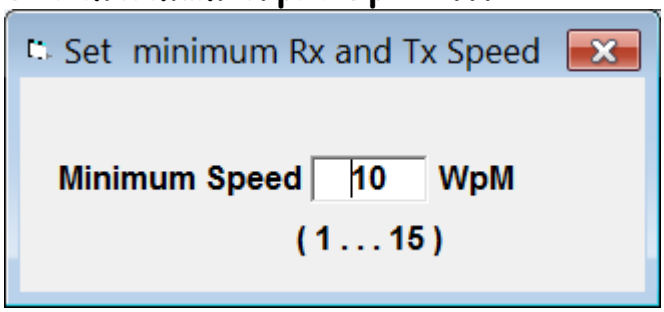
From here you navigate to the listed topics.
A click to a topic will open a sub-menu where you alter settings or open dedicated windows where can do individual settings.

Options -RX Settings

Performance options for decoding Morse signals



Set minimum WpM Speed...



MRP40 automatically adapts his decoder to the speed of the incomming sation. In situations where MRP40 is running for a long time while no signals are present it can happen that MRP40 is trying to adapt to noise signals. This typically leads to very low speed values. If then a Morse signal with normal speed is coming in MRP40 is not able to decode because the extrem low speed setting is not applicable to the incoming signal. To avoid this situation normally a minimum speed of 10 WpM is set. If you want to operate in QRSS mode (very slow Morse code) then you can lower the Min WpM speed down to 1 WpM.

Text Formatting...

Improves the readability of the decoded text. Read more details in the **Chapter Text Formatting...** below.

Auto GoMax

Does automatically select the strongest signal in the spectrum for decoding. It is a neat function that is for example useful for unattended operation of MRP40

Weak Signal Decoding
This is the recommended default setting!
In this mode even very low signals are "pulled" out of the noise.

Medium Signal Decoding
In this Mode very low signals are ignored, the advantage is that in situations with strong in-band-noise less decoding errors occure.

Strong Signal Decoding
Low and medium signals are ignored. This mode is to prefer if you have locally generated clean, noise-free signals for example from tone generator from training key.

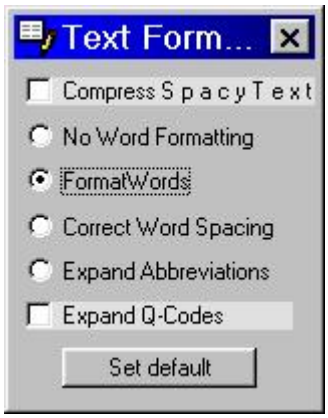
CW Filter Narrow
This is the recommended default setting!
The internal Software CW filter is set to the minimum reasonable bandwidth to suppress all other near by (Noise) signals. Note: the bandwidth is automatically adapted, proportional to the receive speed (words per minute)

CW Filter Wide
The internal Software CW filter is set to the double of minimum required bandwidth to enable decoding of Morse signals that are quickly drifting or kind of FM-modulated.

Chapter Text Formatting...

- This feature performs a word recognition on the recieved text
- The text is modified in an effective way to improve the readability
- You can choose different levels of text formatting

Click: - Options - Rx Options - Text Formatting
You will see this window:



Slowly move the mouse pointer to any button and you will automatically get a

short explanation of what that feature does for incoming Morse text. Just tune your radio into some English CW QSO and you will see how it works. Just try the text formatting feature for a few days!
- "No Word Formatting" switches OFF all options.
Below you can see what the several Text Formatting options do.
This text formatting is not an exact science and works only for english text. There are, and always will be, some errors. Nonetheless, it significantly helps to improve the readability of the text.

No Word Formatting:
All all text formatting options are deactivated.
Incoming raw text, with no spaces between the words is hard to read then. Like in this example:

..TNXFERALLINFOESUFBCPIFBURRIGFBSIGS-
RIGHEREABT8ØWATTOUTPUTESANTDIPOLE9MTRSUPLAZYVEE-
WXCLOUDYWIDRAINSHOWERSESWINDYTEMPNOW8C-
DRROYTNXFERFBQSOQSLOKVIACLUBESPSEQSL?
GUDDXHPECUAGNESVYGE, TNX73CUL+ON6FTDEDL4SAV+
GEDROMESTUFERCALL= URRSTRST58N58N=
QTHQTHNRANTWERPANTWERPANTWERPESNAMENAMEISROYROY= HW?
KN+

Format Words:
The appearance of the text is improved by using a capital letter for the first character of the word,- which is easier to read:

. . TnxFerAllInfoEsUfbCpiFbUrRigFbSigs-
RigHereAbt8ØWattOutputEsAntDipole9MtrsUpLazyVee-
WxCloudyWidRainShowersEsWindyTempNow8C-
DrRoyTnxFerFbQsoQslOkViaClubEsPseQsl? GudDxHpeCuAgnEsVyGe, Tnx73Cul+
On6FTDeDL4SAV+ GeDrOmEsTuFerCall= UrRstRst58N58N=
QthQthNrAntwerpAntwerpAntwerpESNameNameIsRoyRoy= Hw?KN+

Correct Word Spacing:
The appearance of the text is improved by adding a space between the recognized words,- which is much easier to read:
. . Tnx Fer All Info Es Ufb Cpi Fb Ur Rig Fb Sigs- Rig Here Abt 8Ø Watt Output Es Ant Dipole 9 Mtrs Up Lazy Vee- Wx Cloudy Wid Rain Showers Es Windy Temp Now 8C- Dr Roy Tnx Fer Fb Qso Qsl Ok Via Club Es Pse Qsl? Gud Dx Hpe Cu Agn Es Vy Ge, Tnx 73 Cul+ On6FTDeDL4SAV+ Ge Dr Om Es Tu Fer Call= Ur Rst Rst 58N 58N= Qth Qth Nr Antwerp Antwerp Antwerp ES Name Name Is Roy Roy= Hw? KN+

Expand Abbreviations:
. . Thanks For All Info And Ultra Fine Copy Fine Your Station Equipment Fine Sigs-

Station Equipment Here About 8Ø Watt Output And Antenna Dipole 9 Meters Up Lazy Vee- Weather Cloudy With Rain Showers And Windy Temperature Now 8C- Dear Roy Thanks For Fine Qso Qsl Ok Via Club And Please Qsl? Good Dx Hope See You Again And Very Ge, Thanks Best Wishes See You Later+ On6FTDeDL4SAV+ Good Evening Dear OM And Thank You For Call= Your Rst Rst 589 589= Qth Qth Near Antwerp Antwerp Antwerp ES Name Name Is Roy Roy= How Copy? KN+

Expand Q-Codes:

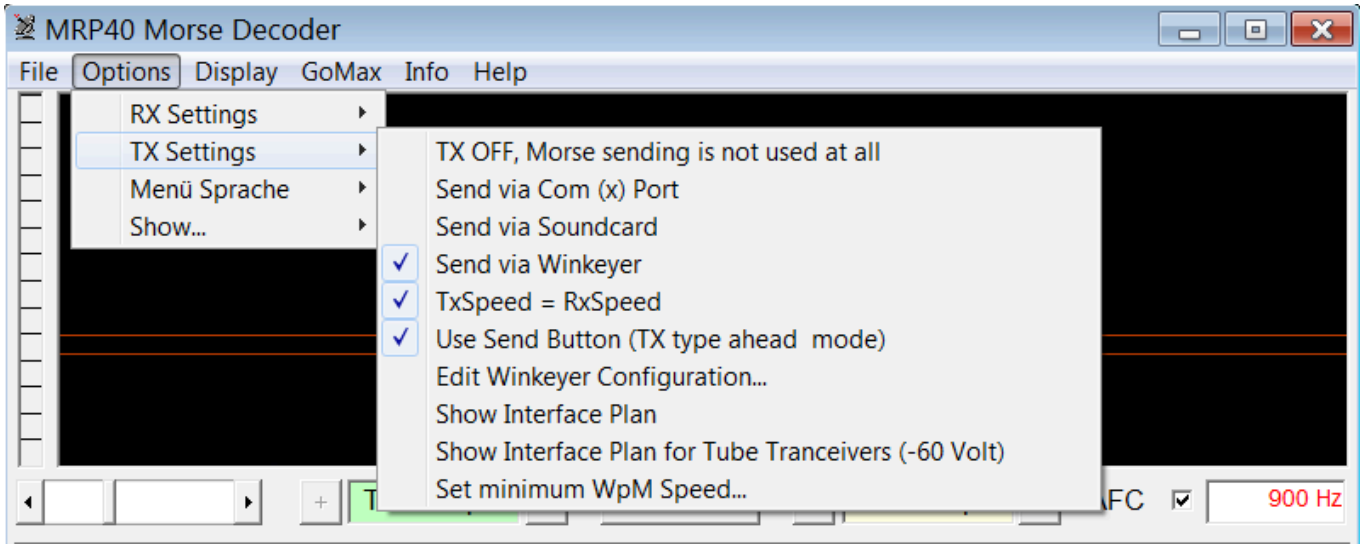
. . Thanks For All Info And Ultra Fine Copy Fine Your Station Equipment Fine Sigs- Station Equipment Here About 8Ø Watt Output And Antenna Dipole 9 Meters Up Lazy Vee- Weather Cloudy With Rain Showers And Windy Temperature Now 8C- Dear Roy Thanks For Fine Communication I am acknowledging receipt Ok Via Club And Please Can you acknowledge receipt? Good Dx Hope See You Again And Very Ge, Thanks Best Wishes See You Later+ On6FTDeDL4SAV+ Good Evening Dear OM And Thank You For Call= Your Rst Rst 589 589= My position My position Near Antwerp Antwerp Antwerp ES Name Name Is Roy Roy= How Copy? KN+

Compress S p a c y T e x t:

For example this sequence of characters will be compressed from D L 4 S A V to DL4SAV

Options -TX Settings

Essential options for sending Morse signals



TX OFF, Morse sending mode is not used at all

Use this option if you do not want to send Morse using your computer keyboard.
The MRP40 program window will be cleared from sending buttons etc. to give maximum available size to the receiving text box.

Send via Com (x) Port A window will pop up where you enter the ComPort number to be used for sending.
Click the "Save" button to activate the selected port.
Note: the number "0" indicates that no ComPort is active
Once a valid ComPort number is saved the MRP40 main window will show an additional row of buttons and an additional
Text Box for sent text.
For Send pin choose DTR or RTS (That pin does key out the Morse sequence)
The PTT Function will automatically be assigned to the other pin.
The PTT Pin is activated all the time while the Morse sequence is keyed out.
The PTT Pin can also be activated while you send via soundcard (instead via ComPort) just activate the related checkbox.

Send via Soundcard Two windows will pop up:

a) Soundcard:
Here you can select the TX (and Rx) soundcard.
Enter the TX tone frequency (Side Tone) or choose Tx-Freq.= Rx-Freq.
This does automatically set the Audio Tx frequency equal to Rx Frequency.
This is very helpful to perfectly match (zero beat) the frequency of remote CW station
(your transceiver does Tx in SSB mode the soundcard audio out signal)
Via 2 Buttons one can open the according volume control panels.
Before changing any volume make sure the correct soundcard is selected in that volume control panels.
(-Options -Properties -MixerDevice)
The big button will pop up a small tool that allows you to save (or reload) your valuable volume

settings.
Before you do that make sure the correct soundcard is selected in that small tool.

b) RS232 Comport configuration
In case you need in addition to activate a PTT pin while sending via soundcard you can do that here:
- For PTT-Pin choose DTR or RTS
- Make sure you enter a correct ComPort number.
- Make sure you click the "Save" button to let the entered number take effect.
- Note: the number "0" does indicate that no ComPort is activated.
- Check the box named **Activate PTT pin while sending via soundcard**

Send via WinKeyer
A window will pop up where you need to enter the ComPort number the WinKeyer is assigned to.
To find out the correct COM Port number of WinKeyer you might want to lookup the list of COM Ports on your computer this way: In the search box on the taskbar, type **device manager**, then select "Device Manager" from the menu and click it, now look in the list of different types of devices for **Ports (COM & LPT)** expand that section and check out which port number is related to the WinKeyer.

Once you have enterd the ComPort number click he **Save** button. It will open the WinKeyer. If successful the WinKey IC-version will be displayed in the headline of the window.

Please also configure the **Winkey Mode** and then click on the button **Set this Mode**

Use Sendbutton (TX type ahead mode)
Activating this option allows you to type (and correct) the text completely before it is send.
Note: the Morse sending mode must be activated, then this option will show up a button with the caption "Send"
Deactivating this option will hide the send button

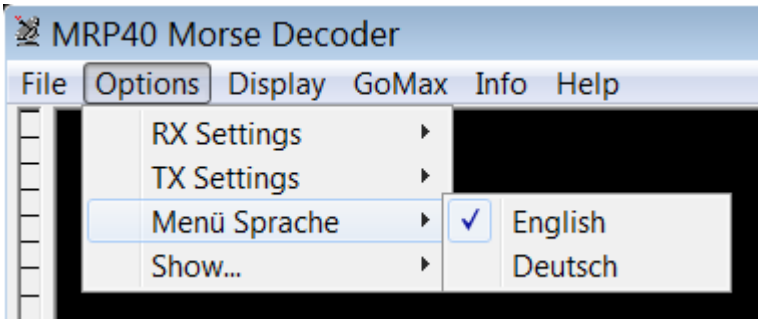
Edit Comport Pin Configuration
A window will pop up where you can enter the ComPort number to be used for sending.
Make sure you click the "Save" button to let the entered number take effect
Note: the number "0" does indicate that no ComPort is activated.
For Send pin choose DTR or RTS (That pin does key out the Morse sequence)
The PTT function will automatically be assigned to the other pin.
The PTT Pin is activated all the time while the Morse sequence is keyed out.
The PTT Pin can also be activated while you send via soundcard (instead via ComPort) just check the related checkbox.

Show Interface Plan
Easy to build up transistor interface with R-C Low-Pass to be connected to DTR- or RTS- Pin of RS232 ComPort.
On the output side the interface has to be connected to the key input of transceiver.
Note: instead of this transistor interface we recommend to use the "SignaLink" interface box. It does provide galvanic isolation between PC and transceiver. Just look it up on the internet.

Show Interface Plan for Tube Transceivers (-60 V)

Easy to build up transistor interface with relay.

Options -Menü Sprache



English

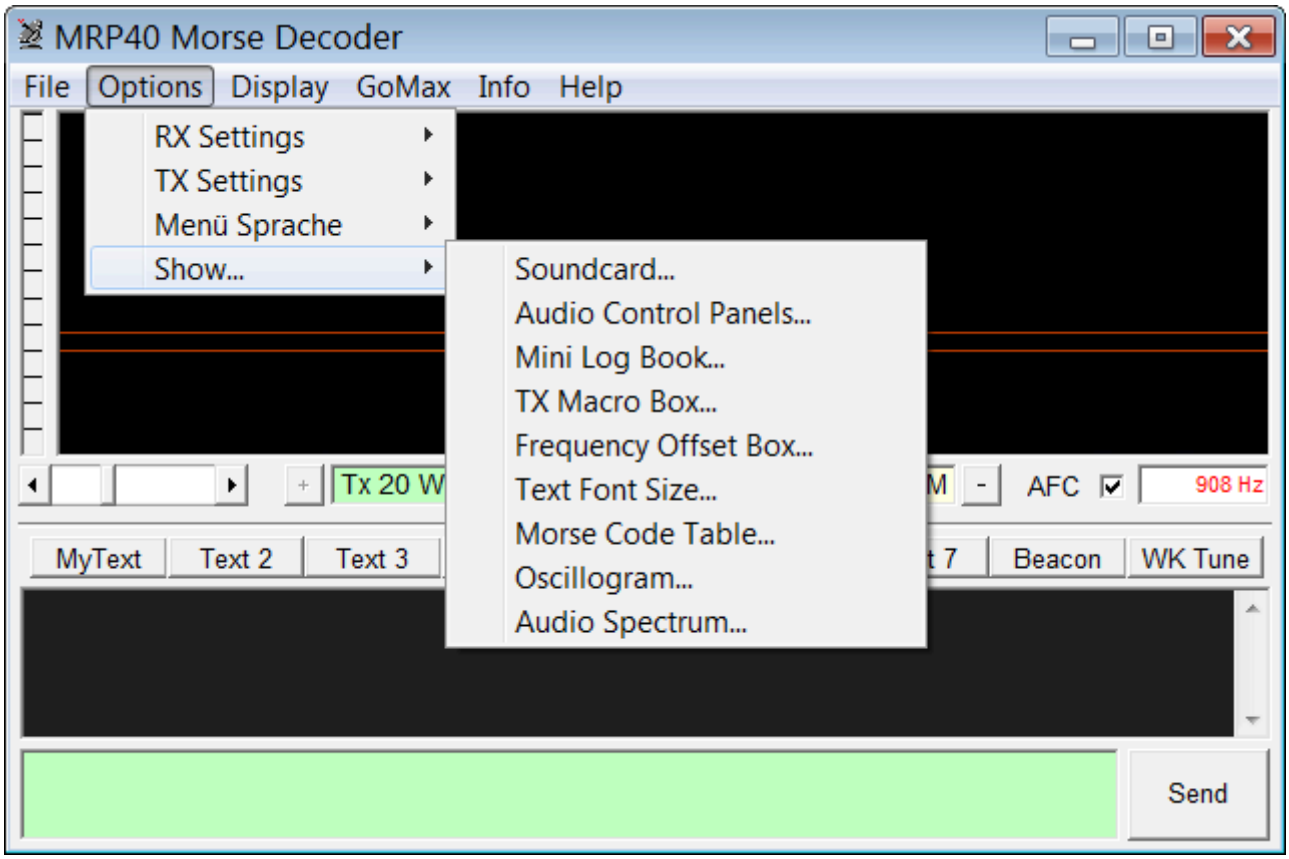
Here you can alter the menu language between German and English.
All menu text will appear in the other language then.

Deutsch

Hier können Sie die Menü-Sprache zwischen Englisch und Deutsch umschalten.
Alle Menü-Texte werden in der anderen Sprache angezeigt.

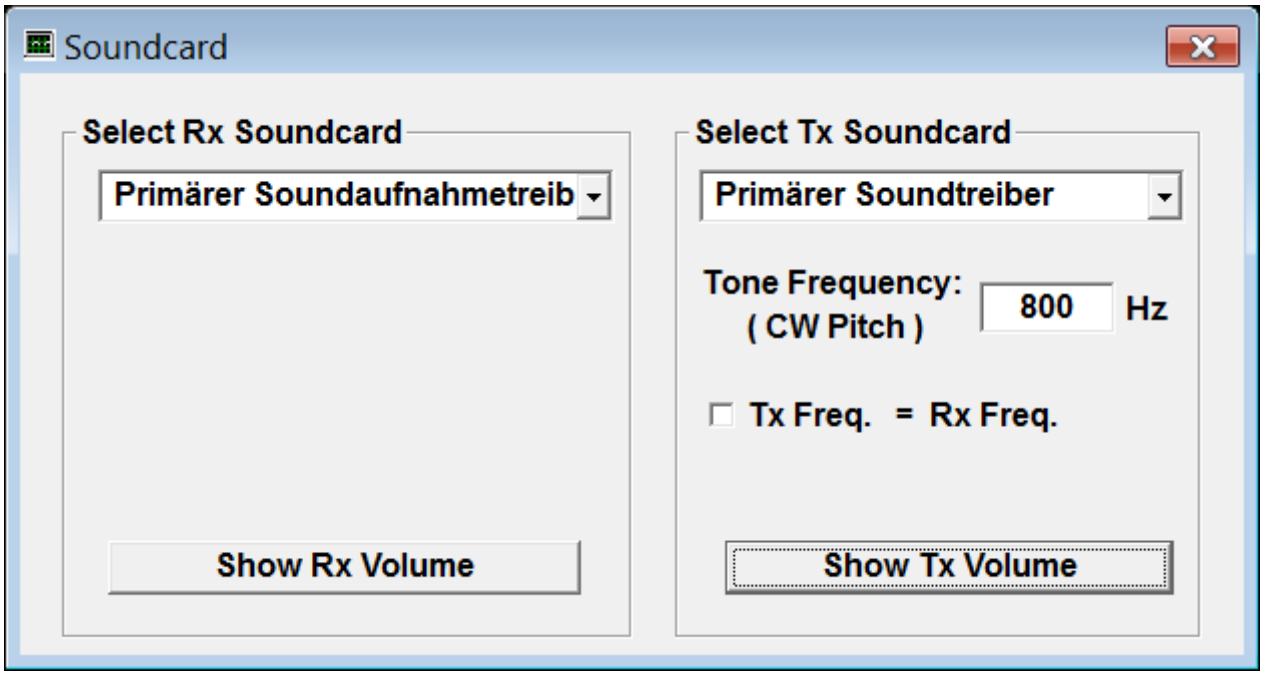
Options -Show...(View)

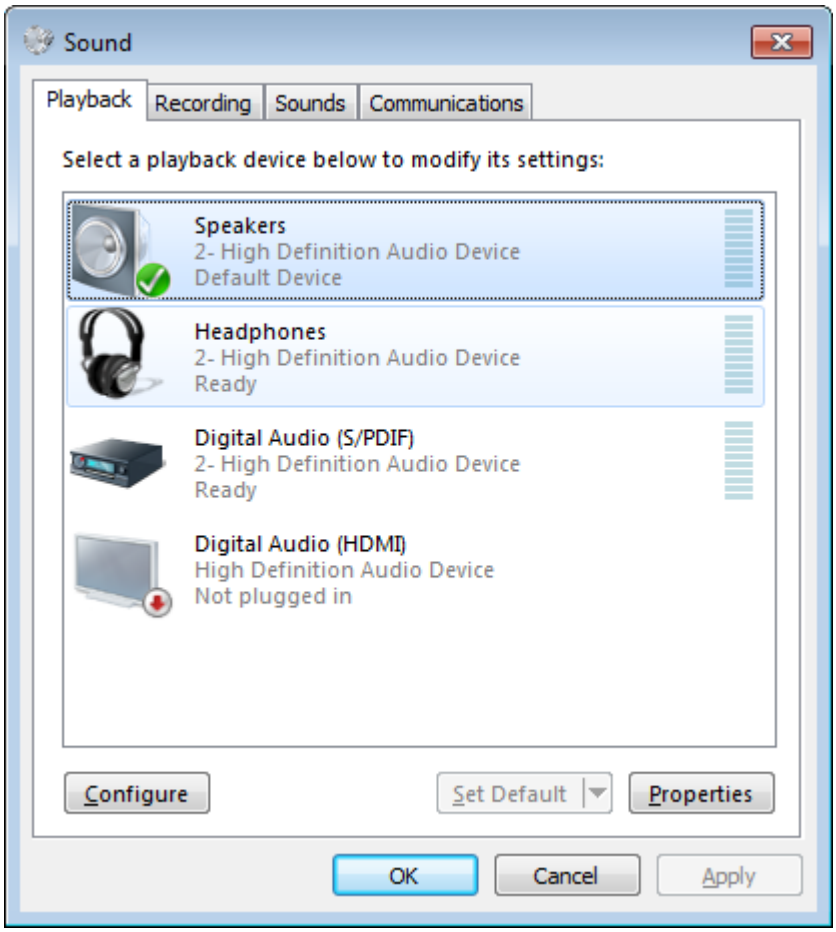
From here you navigate to the listed topics
A click to a topic will open a separate window where you can do individual settings.



Options -Show -Soundcard

Here you want to select the applicable sound device for Rx (and Tx)





Show Rx Volume

Opens the Windows audio control panel tap "Recording". Here you open the audio input device for decoding Morse. Just select your device and click

"Properties" and then the tab "Level" to adjust the Volume to a reasonable level.

Tip: When using Microphone as input source it can be very useful to activate the additional Pre-Amplifier "MIC-Boost". In the Microphone section click button "Advanced" there you can activate the "MIC-Boost"

Show Tx Volume
Opens the Windows Volume Mixer and the Windows audio control panel tap "Playback". Here you open the audio output device for sending Morse via Soundcard. Just select your device and click "Properties" and then the tab "Level" to adjust the Volume of that devic to a reasonable level.

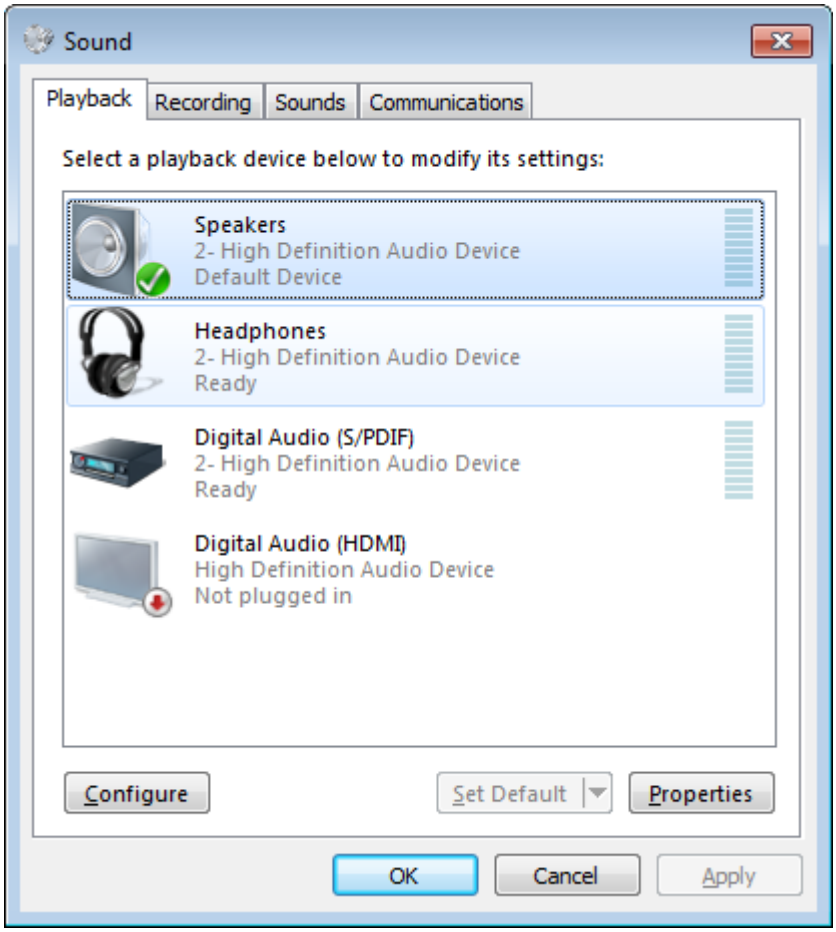
For more information lookup in the internet the "Sound" related Help Topics from Microsoft

Tone Frequenxy
For Morse code sending you can enter your preferred TX Tone Frequency (Side Tone) or choose Tx-Freq.= Rx-Freq. that does automatically set the Audio Tx Frequency equal to Rx Frequency. This is very helpful to perfectly match (zero beat) the frequency of remote CW station (your transceiver does Tx in SSB mode the soundcard audio out signal)

Options -Show -Audio Control Panels

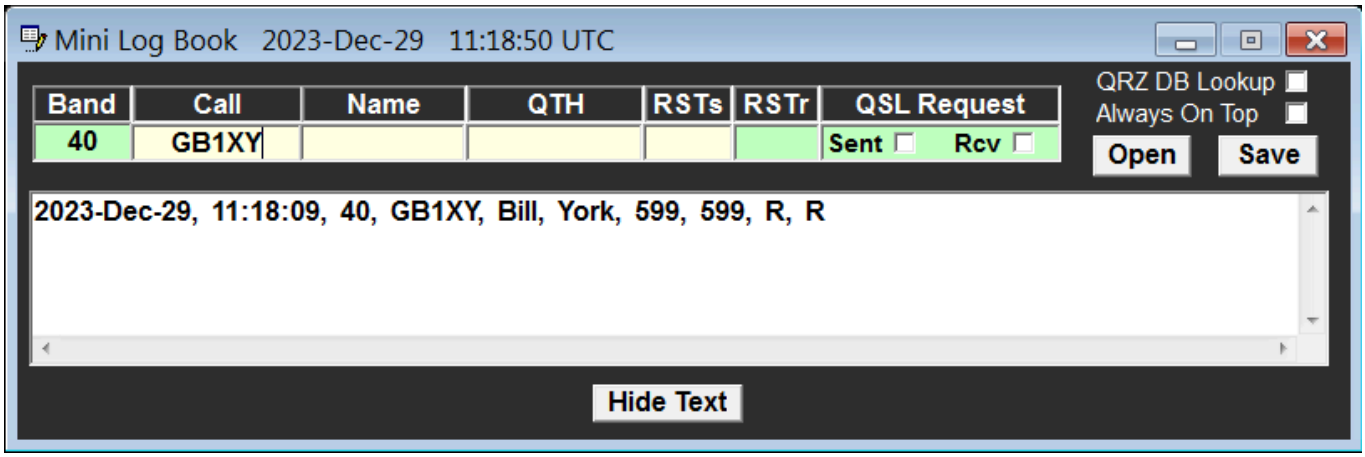
Opens the Windows audio control panel. Here you open the audio devices for Rx and Tx Morse. Just selected your device and click "Properties" and then the tab "Level" to adjust the Volume to a reasonable level.

For more information lookup in the internet the "Sound" related Help Topics from Microsoft



Options -Show -Mini Log Book

A window for logging your contacts will pop up.



Mini Log Book does support ADIF record format.
Click button "Open" to view the Log Floder with .txt and .ADIF files
The green fields need to be filled in manually.
The yellow fields can be filled in automatically by mouse click.
First you copy a call sign to the field "call" and MiniLogBook automatically looks up previous contacts with that recent call and display them as list. Then copy Name (must be done before QTH), proceed with QTH and RST

There are 3 Methods to copy info to the MiniLogBook:

Method 1:
In the received text double click on Call, Name, QTH, RST the info is immediately copied to the related fields.
The text must be formatted well word by word without extra spaces.
In case of weakly formatted text use method 2:

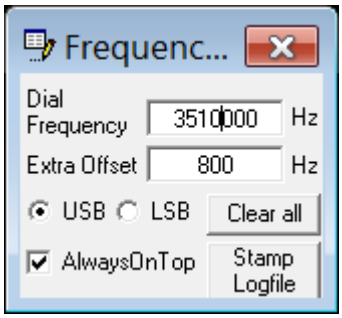
Method 2:
Received text is for example: CqCqK3IFYIV3IFYIV3IFYK Here you can not just click on the call sign. So you need to select with the mouse the call sign inside the string like this: CqCqK3IFYIV3IFY**IV3IFY**K the moment you release the mouse button the selected text will automatically go into TxMacro box. Use same systematic in case of received text with spaces,- for example: `IV3 IF Y`
Just select the text like this: **`IV3 IF Y`** the spaces will be removed automatically.

Method 3:
After you have selected some portion of text point with mouse to any field inside MiniLogBook and perform a double click. The content of that field will immediately be replaced by the selected text. Spaces are removed automatically.

Note:
The MiniLogBook displays and uses UTC Time for the logging Requirement for Proper UTC Time is that the time zone settings on your PC are correct.
The MiniLogBook does get the infos 1:1 from TxMacro. Please refer to section Tx Macro Box...

Options -Show -Frequency Offset Box

This small window will pop up:



Purpose

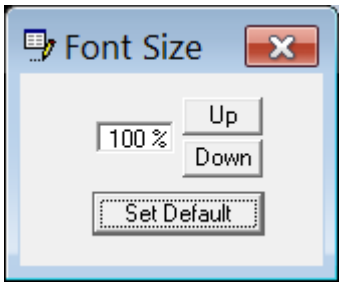
The purpose of this window is to correct MRP40's Frequency Display in a way that the real over the air frequency of the incoming Morse signal is displayed and recorded in the log file. (stamp)
The DisplayFrequency (Red number Hz on the right side of MRP40 Window) is calculated as follows:
USB activated: DisplayFrequency = DialFrequency + AudioFrequency + ExtraOffset
LSB activated DisplayFrequency = DialFrequency - AudioFrequency + ExtraOffset

While:
DialFrequency is the Frequency one has "Dialed" on the Transceiver
ExtraOffest is the side band offset of your Transceiver
AudioFrequency is the frequency of the Morse Tone you can hear physically on speaker or headphone
(provided that MRP40 is actively decoding particular this Morse Tone. e.g. the Morse signal visible between the two red lines)

Note: The Settings in this "Frequency Offset Box" have absolutely NO link and NO effect to the performance of signal filtering and decoding algorithm itself.

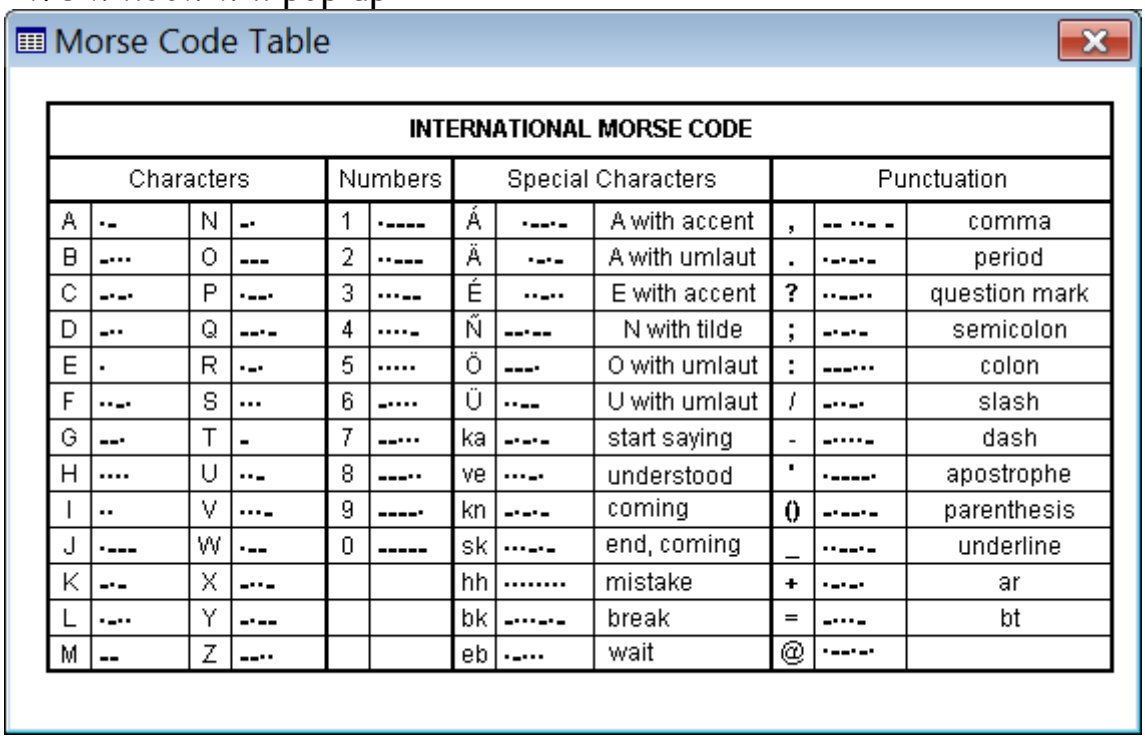
Options -Show -Text Font Size

Just choose a convenient font size. It is applied to:
RX-Text box
TX-Text box



Options -Show -Morse Code Table

This window will pop up:



INTERNATIONAL MORSE CODE

Characters				Numbers		Special Characters			Punctuation		
A	·–	N	–·	1	·————	Á	·——·–	A with accent	,	––··––	comma
B	–···	O	———	2	··———	Ä	·–·–	A with umlaut	.	·–·–·–	period
C	–·–·	P	·——·	3	···––	É	··–··	E with accent	?	··––··	question mark
D	–··	Q	––·–	4	····–	Ñ	––·––	N with tilde	;	–·–·–	semicolon
E	·	R	·–·	5	·····	Ö	——–	O with umlaut	:	———···	colon
F	··–·	S	···	6	–····	Ü	··––	U with umlaut	/	–··–·	slash
G	––·	T	–	7	––···	ka	–·–·–	start saying	-	–····–	dash
H	····	U	··–	8	———··	ve	···–·	understood	'	·————·	apostrophe
I	··	V	···–	9	————·	kn	–·––·	coming	()	–·––·–	parenthesis
J	·———	W	·––	0	—————	sk	···–·–	end, coming	_	··––·–	underline
K	–·–	X	–··–			hh	·····	mistake	+	·–·–·	ar
L	·–··	Y	–·––			bk	–···–·–	break	=	–···–	bt
M	––	Z	––··			eb	·–···	wait	@	·––·–·	

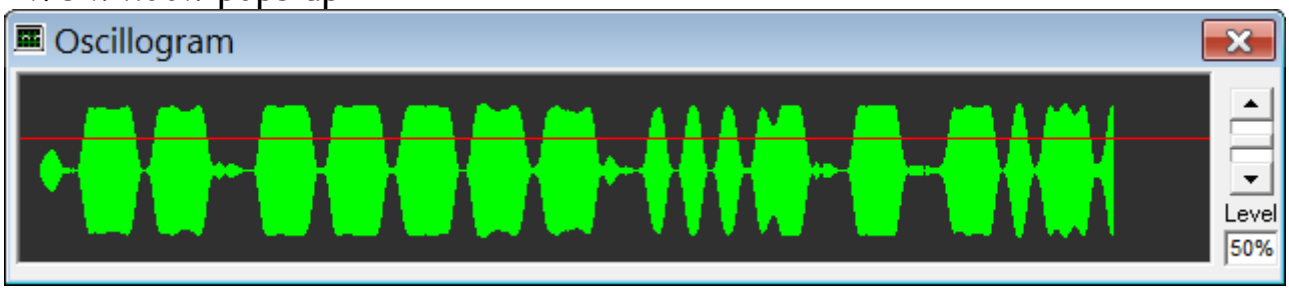
The table shows which Morse sequence is decoded to which ASCII Character(s).
Basically the MRP40 loads the file CodeTable.txt. The Table contains two ASCII Codes and the related Morse Sequence. Is the second ASCII Code "0" then only one character is displayed for that related Morse Sequence.

One can manipulate the Table and freely define own set of ASCII Codes for a certain Morse Sequence.

Note:
Keep the format of the Table and make sure the Table has minimum 64 lines.
It is recommended to make a backup copy of the file CodeTable.txt before manipulation!

Optons -Show -Oscillogram

This window pops up:



The window shows life the amplitude of the filtered audio signal.
The red line indicates the threshold level for decoding.
The recommended default level is 50%
The level can be varied between 29% and 71%
In noisy situations where spikes periodically hit the threshold level it can be very useful to apply a level of 60% or more. In Addition: At Levels other than 50% the Automatic-Gain-Control (AGC) is advised to do less amplification of low signals to avoid that non-morse signals hit the threshold.
Weak signals are decoded best with a level of 50%