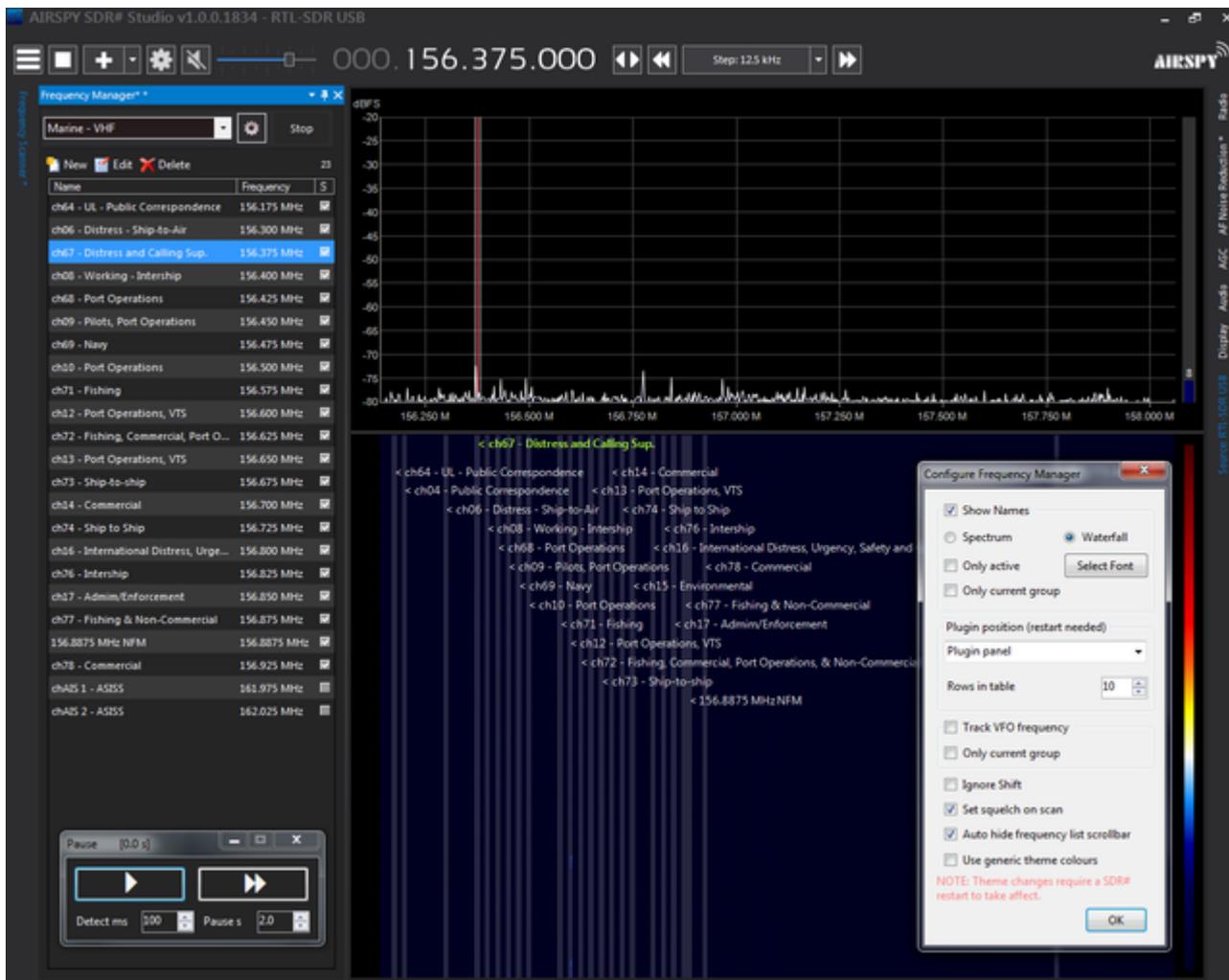


Frequency Manager (FreqMan) v1.1 – SDR# plug-in

original by TSSDR (Vasili) – Modified/Updated plug-in and documentation by [thewraith2008](#) – January 2022



This Frequency Manager (FreqMan) plug-in is designed to replace the standard one that comes with SDR# offering some additional features.

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Description

This frequency manager improves on the standard SDR# frequency manager by including an additional comment field and scan lockout into the database. It also optionally displays a marker and label on either the spectrum or waterfall displays so they can be read without having to mouse over the frequency to see label. A couple of options exist to limit the displayed labels.

The frequency list highlighting can track the VFO.

The label for the VFO is shown on the spectrum or waterfall highlighted to stand out from other listed frequencies labels.

Also included is simple scanner to scan a selected group of frequencies.

Features

- Store frequencies in group with label, mode, filter bandwidth and comment with optional centre frequency and frequency shift
- Simple scanner
- Display stored frequencies (label/marker) in spectrum or waterfall without the need to mouse over them
- Highlight frequency entry in list when VFO matches entry

Installation (or updating)

*** Backup the '**frequencies.xml**' file in SDR# folder ***

NOTE: It should be noted that not all SDR# plug-ins may work together very well. If issues seen or if in doubt, then set-up a fresh SDR# with only this plug-in installed. This is the recommended way. (Don't use the SDR# community installer)

Install - SDR# v1799 and earlier

Copy '**SDRSharp.FreqMan.dll**' to your SDR# folder.

Update the file 'Plugins.xml' (using notepad) with the following line (if it has not been done):

- Tip: Add the line under the existing "Frequency Manager" entry (No need to remove that one)

```
<add key="Frequency Manager" value="SDRSharp.FreqMan.FreqManPlugin,SDRSharp.FreqMan" />
```

Install - SDR# 1800+

Copy '**SDRSharp.FreqMan.dll**' to your SDR# 'Plugins' folder.

Update the file 'Plugins.xml' (using notepad) with the following line (if it has not been done):

```
<add key="Frequency Manager" value="SDRSharp.FreqMan.FreqManPlugin,SDRSharp.FreqMan" />
```

NOTE: For SDR# 1800+, this line is required so it disables the standard SDR# Frequency Manager. Don't use both managers as it will possibly corrupt the database or loss data.

Usage: Adding a frequency entry

- With SDR# playing
- Set mode (e.g. AM, NFM etc...), filter bandwidth (e.g. 12500 etc...)
- Tuning to a frequency a click "New"
- Change fields to your liking
- Click OK to store

Usage: Delete a frequency entry

- Highlight frequency entry from list
- Either:
Click "Delete" and follow the prompts
Right click highlighted entry and select "Delete" and follow the prompts

Usage: Edit a frequency entry

- Highlight frequency entry from list
- Either:
Click "Edit" and change fields to you liking
Right click highlighted entry and select "Edit" and change fields to you liking
- Click OK to update

Usage: Move to frequency

- With SDR# playing
- Either:
Double click an entry in the frequency list
Highlight an entry in the frequency list, then press "Return"

Usage: Scanning

- On right side of each frequency entry is a check-box.
When enabled, that frequency will be scanned if the group is selected
Otherwise it's skipped while scanning
- Select one of the groups from drop-down box
- Click "Scan"
- The pop-up window will allow manual pausing, skipping and scan speed and delay
- Clicking an entry while scanning will set the next frequency to start scanning from

NOTE: SDR# Squelch must be enabled and threshold correctly set for scanning to work correctly.

- Use the option "*Set squelch on scan*" to enable automatically on scan start
It will restore last squelch state when scanning stopped
You will still need to manually set squelch threshold as normal

NOTE: Don't set "Detect ms" to low as signal detection depends on SDR# squelch detection logic.

- SDR# squelch detection logic is a little slow
- Setting value too low **will** miss activity

NOTE: This is a simple scanner, don't expect fast scan rates or signal detection performance.
If you want a better scanner try the *Frequency Scanner* plug-in I've updated.

Additional information about controls/options

Main panel

Group selector

Selects all (entries), Favourite (entries), Duplicates (entries) or one of the defined groups (entries). This will filter the frequency list shown.

This will be the scanned frequencies list (when entries checked and when the scan mode started).

Configure

Opens plug-in options window.

Scan/stop

Start/Stop scan mode.

The check-boxes in the frequency list for each frequency entry determines (when checked) what frequencies will be scanned when scan is enabled. (Otherwise they are skipped)

New

Edit

Delete

For adding or changing of frequency entries to database.

NOTE: *Edit* and *Delete* are also available as right click on each frequency entry.

Number of entries in selected group

Shown in label to right of 'Delete' button.

Frequency list (Group filtered list)

The check-boxes for each entry is for the scanner part of this Frequency Manager.

These frequencies when checked, will be scanned when scanning is enabled.

Configure (cogwheel next to group dropdown)

Show Names

Enable displaying of labels/markers in either the Spectrum or Waterfall.
Only displays labels for entries in database that are in the visible spectrum.

Spectrum/Waterfall

Selects where labels/markers will appear.

Only active

Will only show the label/marker for the active frequency (VFO).
Otherwise will show all labels in the visible spectrum.

Only current group

Will only show labels/marker in the visible spectrum for entries in database that match the selected group.

Select Font

Set font, size, style to be used to display the labels in the spectrum/waterfall.

Plug-in position (SDR# restart needed)

Where to display the plug-in panel.
Leave on "Plugin panel" in newer SDR# 1778+.

- This newer version already allows you to move around the window. (docking)

Rows in table

Only useful in SDR# 1777 and earlier. (Which uses the fixed side panel)

Track VFO frequency

Will make visible and highlight the frequency entry in the frequency list when the VFO frequency matches a entry in list.

Only current group

Will make visible and highlight the frequency entry in frequency list when VFO frequency matches it and entry matches the selected group.

Ignore Shift

Don't apply the defined entry value for 'Shift' if set (> 0).

Set squelch on scan

When "Scan" clicked, the squelch will also be enabled.
When stopped, the squelch state will be restored to what it was before scan started.

Auto hide frequency list scrollbar (UI hack)

Hide the scrollbar part of the frequency list.
This suited for dark themes where the scrollbar is bright white.

Continued...

Use generic theme colours (SDR# restart needed)

Only for SDR# 1717+ with Telerik themes.

When enabled, will use predefined colours (for light or dark) regardless of theme.

When not enabled, will match some of the selected themes colours.

Some colouring for Telerik controls use a gradient. This cannot be mimicked with standard form controls. One colour is chosen for this type.

If theme is changed during a SDR# session, then it will keep using the last loaded colours.

A SDR# restart is required for colour matching to take affect.

NOTE:

An attempt has been made to match SDR# theme colours but this may not always work or look right. An SDR# update may break this at any time.

Scan control (Window)

Play/Pause

Pause on frequency or resume scanning.

Next

On signal, when pressed will resume scanning.

Detect ms

Delay scan speed.

Required to get detection of signal as SDR# is slow to respond with squelch OPEN.

NOTE: Don't set "Detect ms" to low as signal detection depends on SDR# squelch detection logic.

- Setting too low will miss activity

Pause s

The delay until scan resumes after no signal seen. (after there was a signal)

Database Entry Information fields (for creating new or editing an entry)

Group

Name

Frequency

Center [default = 0]

Shift [default = 0]

Filter BW

Mode *

Comment

Favourite

* This is fixed (set when 'new' was opened) but double clicking the displayed mode will toggle it between AM, NFM.

If you need a different mode to AM, NFM you will need to delete and create a new entry.

Notes, bugs, limits or other things of possible interest

NOTE:

Not all aspects of this plug-in, whether it be it's usage, features, options, bugs, issues, problems or any other unforeseeable things maybe covered by this documentation.

If frequency duplicates exist, some different behaviours for the labels/markers will be seen

- By default all frequencies will be displayed that exist in the current visible spectrum
- All duplicate markers will see the marker colour become brighter.
This increase in brightness will make the labels harder to read.
- All duplicate labels will be listed.
 - If 'Only active' enabled:
 - Will be listed in order found in database.
 - If 'Only active' disabled:
 - Will be listed in order found in database as follows:
 - When frequency is the tuned VFO:
 - The first occurrence will be shown at top of display (in bold green) with remainder duplicates and other frequencies shown in following list. (in green for duplicates)
 - When frequency is NOT the tuned VFO:
 - Will be listed in order found in database.

The plug-in only offers an certain ability to filter this excessive display of labels/makers.

- If all duplicates use same group, then your doomed.
 - If duplicates exist in different groups then you could select the desired group from drop-box and then use the option 'Only current group' to only draw labels/markers from that group.
 - Use 'Only active' to show the tuned VFO label/marker and maybe reduce number displayed on screen.
-

Labels that are to long will disappear off to the left of the spectrum/waterfall.

- A smaller/narrow font will allow more to be shown.
-

There is only a finite amount of room to display labels in the Spectrum/Waterfall

- This varies depending on size of label and SDR# screen size.
 - When there are to many labels to display, they will start to overwrite each other at bottom of display and will be hard to read.
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The use of this plug-in is not guaranteed when using with SpyServer network

TODO: (Maybe)

- Store scan window location

This modified version and documentation by thewraith2008 started in February 2020 see ***Changelog.txt*** for more details about changes and fixes.

Support forum here:

<https://forums.radioreference.com/forums/software-defined-radio.193/>

Release thread here:

<https://forums.radioreference.com/threads/sdr-plug-in-frequency-manager-freqman-updated.418242/>

NOTE: Support is not guaranteed. Especially if the answers are contained in the documentation or on forum.

Special thanks to the creators of the following software:

SDRSharp (SDR#) by Youssef Touil

- <https://airspy.com/>

FreqMan (this original SDR# Plug-in) by Vasili (TSSDR)

- <http://rtl-sdr.ru>
- Thanks Vasili for allowing me to update this plug-in.

Necessary Disclaimer:

- This program is "as is"
- This program most probably contains errors, bugs or whatever and that it may crash itself, SDR#, the plug-ins, windows or your car. You accept that you use it at your own risk.
- I make no promises to update it or support it.
- I'm under no obligation to implement anything.
- The creator of SDR# has the right to change their code as they see fit. Because of this, this program/plugin can and probably will break.
- Not reading the read-me/set-up and usage documentation files may cause you issues.