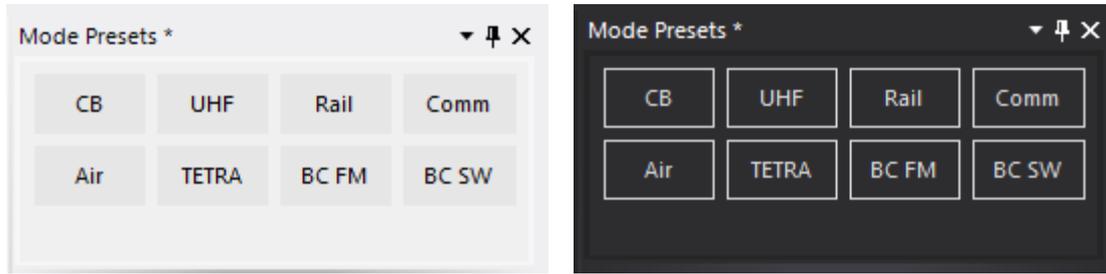


Mode Presets – A SDR# plug-in

original plug-in and documentation by [thewraith2008](#) – April 2022



SDR# side panel for Mode Presets (light and dark theme)



Showing the maximum 100 pre-sets in floating window (with 10 rows and columns)
8 used and 92 disabled/not assigned

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Description

The *Mode Presets* plug-in allows the user to quickly configure SDR# by storing some of SDR#'s most common settings in pre-set buttons.

The number of buttons can be configured by setting number of rows and columns. *
Button font and size and border can be configured.

NOTE: The 'BandPlan' plug-in option 'Auto update radio settings' must be disabled for this plug-in to work correctly.

Features

- Can store up to 100 pre-sets *
- Define up to 10 rows and 10 columns
- Can change button font, size and border
- Can move or delete pre-sets
- Each pre-set can optionally change the following:
 - Label for button
 - Detector
 - Bandwidth
 - Filter order
 - Squelch + Threshold
 - Step size
 - Frequency (manual, VFO or spectrum center)
 - Snap to Grid
 - FM Stereo
 - CW Shift
 - AGC (Hang,Threshold,Decay, Slope)
 - Zoom
- Show some main SDR# current settings on frequency spectrum
- Works in Telerik SDR# UI
- Easily copy the save file to different installation

* There can be from 4 to 100 pre-sets for SDR# v1854+ versions.

* There can be from 4 to 40 pre-sets defined for SDR# pre-1733 versions. (columns limited to 4)

Installation for SDR# v1777 and earlier

Copy the file '*SDRSharp.ModePresets.dll*' to your SDR# folder

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

```
<add key="Mode Presets" value="SDRSharp.ModePresets.ModePresetsPlugin,SDRSharp.ModePresets"/>
```

Installation for SDR# **above v1800:**

Copy the file '*SDRSharp.ModePresets.dll*' to your SDR# **Plugins** folder

There is no need to edit the file '*Plugins.xml*'

NOTE: The pre-sets are saved to '*mode_presets.xml*' and will/must be located in the SDR# root folder.

Usage

NOTE: The 'BandPlan' plug-in option 'Auto update radio settings' must be disabled for this plug-in to work correctly.

Right click a button to defined the values/states that can be applied to SDR#.

Left click a button to apply the settings to SDR#.

- If a short beep is heard, then this indicates that the button has no pre-set or is disabled.

NOTE: Some of the settings may only be applied depending on selection of:

- Detector type
- If the source device is tunable
If not tunable, then the frequency range is limited to the bandwidth of source and if center tuning is selected it will just set frequency normally if it's in range.
The center frequency cannot be changed for non tunable sources.
- This conditions take precedence over the pre-set selection.

Changing number of visible buttons

- Right click any pre-set button and select '*Button Config*' tab.
- Use **Rows [1-10]** or **Columns [4-10]** to increase or decrease number of buttons available.
Columns are fixed to 4 with SDR# pre-1733 versions.

Moving pre-sets to a new pre-set location

- Right click any pre-set button and select '*Move/Delete*' tab.
- Use the left drop down list and select pre-set to move.
- Use the right drop down list and select where to move the pre-set too.
- Click “--->” button.
If a short beep is heard, then you have not selected anything.

This will overwrite the 'To' pre-set with the 'From' pre-set. (with no confirmation)

If the current pre-set (in window) is the same as the pre-set to be moved, then after move the pre-set window will be updated to be the pre-set for the new position.

Deleting pre-sets

- Right click any pre-set button and select '*Move/Delete*' tab.
- Use the left drop down list and select pre-set to delete.
- The right drop down list **must not** have anything selected.
- Click “--->” button.
If a short beep is heard, then you have not selected anything.

If the current pre-set (in window) is the same as the pre-set to be deleted, then after deletion the pre-set window will be closed otherwise it will remain open.

NOTE: The 'BandPlan' plug-in option 'Auto update radio settings' must be disabled for this plug-in to work correctly.

SDR# side panel controls

Pre-set buttons (buttons)

Left clicking a pre-set button applies defined settings values to SDR#.

Right clicking a pre-set button allows user to defined settings values that can be applied to SDR#.

Right clicking also allows access to the '*Move/Delete*' and '*Button Config*' tab options.

- For moving/deleting pre-sets and changing the button configuration (e.g. #, font, border).
- It does not matter what button is used to access this tab.

NOTE: The 'BandPlan' plug-in option '*Auto update radio settings*' must be disabled for this plug-in to work correctly.

Pre-set window – Main

Pre-set label (text-box)

This is the label used on each pre-set button face.

- While not required to be a unique name, it is practical to do so.

The label is not restricted in size for SDR# v1854+ versions but there is a practical limit.

- Long label may disappear off the button or appear on two lines.
Stretch the panel to make the label visible (or make shorter)

For pre-1733 versions of SDR# there can be only 4 characters used for a label.

- The fixed side panel limits this.
- The font used and it's size can affect this and may limit there usage.

Various settings controls

Use the check-box in front of each setting to enable the SDR# setting to be changed.

- Some settings are grouped under one check-box.

If the setting is disabled, then the use of the pre-set will not change the setting in SDR#.

If the setting is enabled, then the use of the pre-set will change the setting in SDR#.

- This can be to enable or disable a SDR# setting.
This will change the value of the SDR# setting.

Main: Settings

- Detector
- Bandwidth
- Filter order
- Squelch + Threshold
- Step size ([see here](#) and [below](#))
- Frequency (manual, VFO or spectrum center)
- Snap to Grid

Double clicking the “**Pre-set label**” (label) it will reset pre-set to default.

When the “**Pre-set label**” field is blank, the button will be disabled when left clicking it.

- If an exist pre-set label is changed to blank, then the setting will be remembered.

The selection of the step size also affects the increment size of the frequency field.

Double clicking the “*” (to the right of the step size field) will show a list of the currently defined step sizes in SDR#. These listed values are the only ones that can be used by SDR#.



Right click the Up/Down arrows in the frequency field will:

- Set field to the current VFO.
- Set spectrum center frequency to field if option “*Set frequency as center*” is enabled.

Pre-set window – Additional

These are additional (to the main) SDR# settings that can be changed.

- FM Stereo
- CW Shift
- AGC (Hang,Threshold,Decay, Slope)
- Zoom

Use the check-box in front of each setting to enable the SDR# setting to be changed.

- Some settings are grouped under one check-box.

If the setting is disabled, then the use of the pre-set will not change the setting in SDR#.

If the setting is enabled, then the use of the pre-set will change the setting in SDR#.

- This can be to enable or disable a SDR# setting.
This will change the value of the SDR# setting.

Global: Show info on spectrum (check-box)

Shows SDR# information on Frequency spectrum

- DetectorType
- BandWidth
- Squelch state and threshold
- Snap to Grid state
- AGC state

Pre-set window – Move/Delete

Move from (drop-box)

Use to select the pre-set to move.

To (drop-box)

Two option exist here for usage:

1. Use to select the pre-set # where the 'Move from' pre-set is moved to.
2. Leave blank. This will cause the 'Move from' to be deleted.

---> (button)

Click after setting the 'Move from' or 'To' drop-boxes to either move or delete a pre-set.

If a short beep is heard, then you have not selected anything.

NOTE: If the current pre-set (in window) is the same as the pre-set to be deleted, then after deletion the pre-set window will be closed otherwise it will remain open.

NOTE: For pre-1733 versions of SDR#, even though you can only use up to 40 pre-sets, you can still move or delete existing ones into or from the pre-sets above 40. (41-100)

Pre-set window – Button Config

Number of button rows [1-10]

Sets the number of rows shown in SDR# side panel.

Number of button columns [4-10]

Sets the number of columns shown in SDR# side panel.

This is disabled with SDR# pre-1733 versions as the fixed side panel limits this.

- The columns are fixed to 4. (for maximum of 40 buttons)

Button font (drop-box)

Selects available font to use on button.

NOTE: Some fonts may only work with bold enabled.

These font will cause bold to be forced on when seen.

- If bold needs to be used for the font, then “**Forced ON**” will show.

Any issues with fonts will see the default font selected.

Button font size [6-24]

Selects font size to use on button.

- This label shows as red when enabled.
- If bold needs to be used for the font, then “**Forced ON**” will show.
The check-box may not be checked initially but it is selected.
Will show checked next time the window is opened.

Use bold (check-box)

Selects if font is to use bold on button.

Use button border (check-box)

Selects if to use a border on button.

Sample button (button)

Show the affect the button options have on the button.

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.

The only step size values that you can use are defined in one of these file:

- '*SDRSharp.exe.config*' – old SDR#.
- '*SDRSharp.config*' file – new SDR#.
- You can add your own values by editing one of these files (shown above).
See the key in that file: <add key="stepSizes".....
Follow the value conventions of that key entry when adding new values to list of values.
- If the step size value does not exist in that key, then any other step size you may want will not be available to select from.
Any non-available step size value will not be able to change the step size value in SDR#.

A message will be shown when opening the pre-set configuration window if the **BandPlan** option '**Auto update radio settings**' is enabled. This plug-in needs to have the '*Auto update radio settings*' option disabled to function correctly. (Both plug-in are trying to set SDR# settings)

This modified version and documentation by thewraith2008 started in 2022 see ***Changelog.txt*** for more details about changes and fixes.

Support forum here:

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

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/>
- The ModePresets plug-in utilises code from the SDR# plug-in API.
As such, that code used by the plug-in is the property of Youssef Touil (Airspy).

ModePresets (this original SDR# Plug-in) by thewraith2008

- see me at RR

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.