Font Remix Tools Getting started

Note that there is only one version of the Font Remix Tools, which is compatible with both the Macintosh and Windows versions of FontLab Studio 5.02 or later.

Python 2.3 or 2.4 is required.

Some of the RMX Tools only work with Multiple Master fonts that have a weight axis.

Installation on MacOS

1. Make sure you enable Python scripting in FontLab Studio → Preferences → General Options → Python scripting.

2. Unzip the .zip file.

3. Drag the .flw file onto the FontLab icon in the dock.

4. Restart FontLab or reset the macro system.

Installation on Windows

1. In case it is not already installed on your computer you need to install Python 2.3, which is available from www.python.org/download/releases/2.3.6/.

2. Unzip the .zip file.

3. Drag the .flw file into the FontLab application window.

4. Restart FontLab or reset the macro system.

Automatic updates

The installer allows you to enable automatic updates. This installs a module that regularly checks the Remix Tools web server for new versions and, after confirmation by the user, updates the RMX installation. No personal data will be submitted.
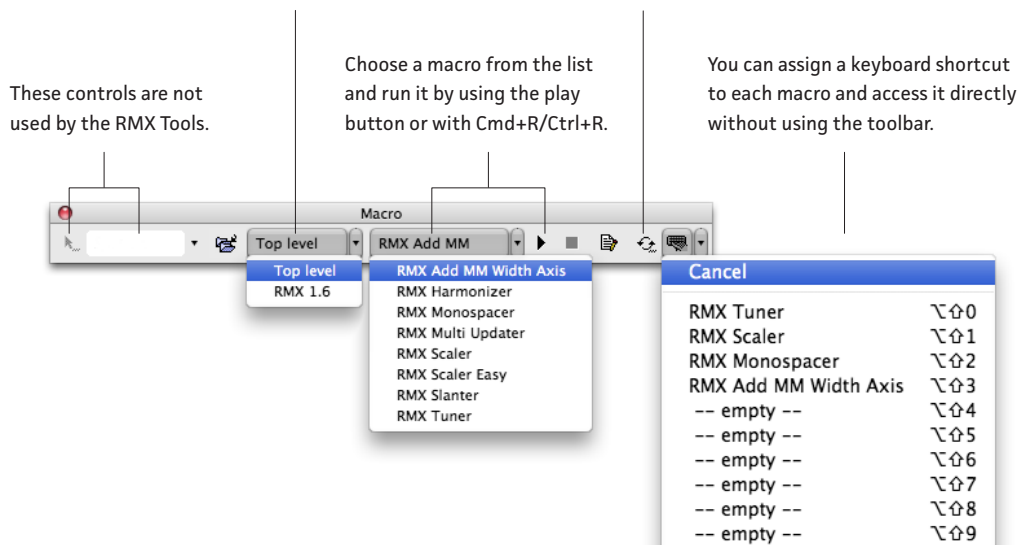
This feature can be deactivated at any time by removing the files RMXupdater.py and RMXupdater.pyc (if present) from the Macros|System|Modules folder.

The Macro Toolbar

In case the Macro Toolbar is not shown, switch it on at View → Toolbars → Macro

The RMX installer allows you to create a subfolder for the macros, which will appear in this list. If the macros are installed in the standard folder they will appear in the top level category.

This button resets the macro system. All entry fields in the dialogs are reset to their default values, and the Harmonizer's "remember my chioce" is cancelled.
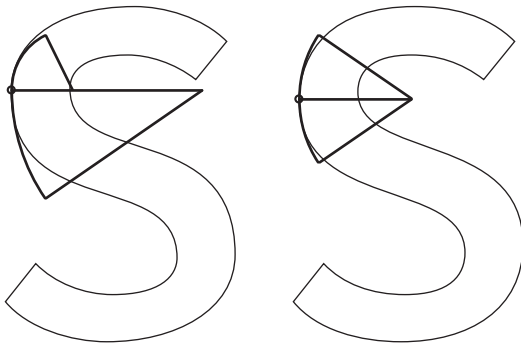
These controls are not used by the RMX Tools.

Choose a macro from the list and run it by using the play button or with Cmd+R/Ctrl+R.

You can assign a keyboard shortcut to each macro and access it directly without using the toolbar.

FontLab is a trademark of Fontlab Ltd.

RMX Harmonizer

The Harmonizer helps design nice, visually consistent curves while it retains the shape as far as possible.

The Harmonizer offers three degrees of smoothness, each of which corresponds to a geometrical concept of continuity:

In FontLab, sometimes even nodes that are set to "smooth" can have kinks, for example, after interpolation or scaling. Use **dekink** to make sure these connections are really straight. This has a very similar effect as double-clicking a smooth node twice but the handles will be even better aligned since RMX handles the integer coordinates intelligently.
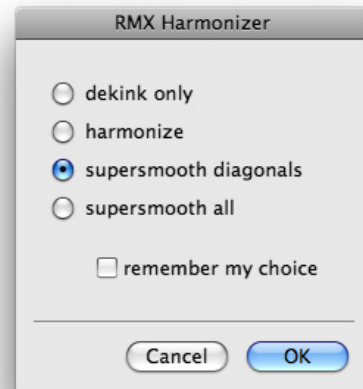
Another condition of visually balanced curve connections is the continuity of curvature. Choose **harmonize** to have the outline automaticaly adjusted so that at each node, the radius of the two joining curve segments is equal. Note that this process includes dekinking.
The next degree of geometric continuity, which the Harmonizer refers to as **supersmooth**, meas that even the change of curvature is continuous at the node. In practice, this means that "flattenings" and "bumps" cause by added nodes are evened out.

If **remember my choice** is selected the dialog will not be shown when the tool is used th next time and the current setting applied. The dialog will come back after restarting FontLab, resetting the macro system or by **shift-clicking the play button** to start the macro. On Windows you may need to install the Python for Windows extensions to enable this feature.

Note that the Harmonizer does not modify the shape as a matter of principle. How much a glyph gets modified glyph depends entirely on the deviation from the required conditions. Consequently, a shape that is already harmonious will not be changed at all if the Harmonizer is applied to it a second time.
If there is a very abrupt change in curvature the Harmonizer assumes it is an intentional design feature and does not treat that node.

RMX Tuner

Use this tool in the Glyph Window to quickly adjust the current glyph.

Adjust the shape of the glyph, using the **+** and **–** buttons. **Shift-click** the buttons to quickly change the value in larger steps. On Windows you may need to install the Python for Windows extensions to enable this feature.

The buttons for **Width**, **Height** and **Weight** are only available for MM fonts with a weight axis. For MM fonts with multiple axes, additional buttons become available for each axis.
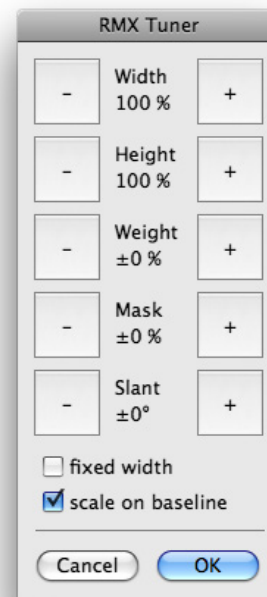
The **Mask** buttons are only available if the glyph has a mask that is compatible with the outline but not identical.

By default, the RMX Tuner preserves the sidebearings. Check **fixed width** when working on tabular glyphs or monospaced fonts to retain the advance width.

If **scale on baseline** is not checked the glyphs will be scaled vertically on the *measurement line*. To position the measurement line, make sure vertical metrics layer is activated under View → Show Layers → Vertical Metrics.

This macro needs to know the standard stems of each master. Please enter them in File → Font Info → Hinting Settings → Standard stems (T1 hinting) → V stems. Only the first value will be considered.

It is helpful to open a *preview/metrics window* in addition to the *glyph window* so you can instantly see the changes in context. In *metrics mode* the RMX Tuner can be used directly from within the *metrics window*.
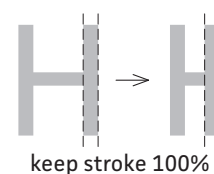
RMX Add MM Width Axis

This macro adds a width axis to an MM font that has a weight axis.

The **standard stem** weights are automatically filled in if standards stems are defined in the font's hinting settings. In order to make use of this convenience, enter them in File → Font Info → Hinting Settings → Standard stems (T1 hinting) → V stems. Only the first value of each master is considered.

Enter the **italic angle** of the existing glyphs in order to retain the angle in the condensed and extended versions.

The **keep stroke** setting controls in how far the weight of the strokes is retained. For example, 0% means pure geometrical scaling, while 100% keeps the stroke weight exactly like it was before. Recommended values are 100% for extralight, 90% for regular weights and 60%–70% for bold and black weights.

Define how much the new masters will be **condensed** and **extended**. Set any of the fields to 100% if you want to process only one weight, or extend the width range only in one direction.

RMX Scaler Easy

Run this tool in the Font Window to scale the selected glyphs.

Used in the Glyph Window, the Scaler allows to precisely adjust all masters of the current glyph.

The **standard stem** weights are automatically filled in if standards stems are defined in the font's hinting settings. In order to make use of this convenience, enter them in File → Font Info → Hinting Settings → Standard stems (T1 hinting) → V stems. Only the first value of each master is considered.

The values for **width** and **height** control the dimensions of the scaled glyphs. Leave the height setting at 100% to generate condensed or extended versions.
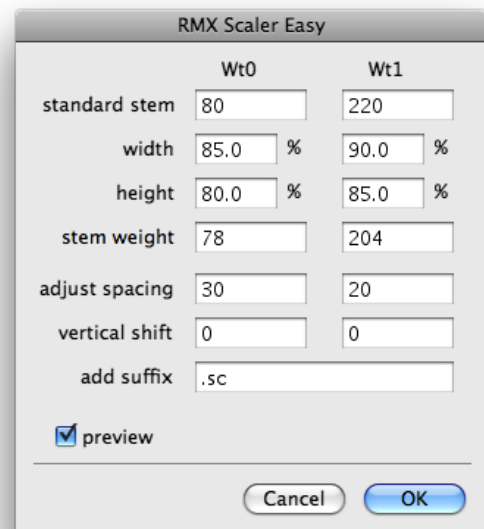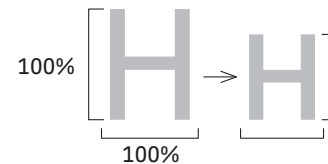
The **stem weight** setting controls the weight of the scaled glyphs. Enter the stroke weight in units.

Reduced versions such as small caps of superiors generally need a looser tracking. Use **adjust spacing** to increase or decrease the sidebearings by a fixed amount while the glyphs are scaled.

Enter a **vertical shift** when creating superiors, inferiors or numerators. Negative values shift the glyph downwards.

Adding a **suffix** creates scaled copies of the selected glyphs. If no suffix is entered, the source glyphs are scaled in place.

Use the **preview** checkbox to see what the result will look like. Note that composites and kerning will not be scaled until OK is pressed.

RMX Scaler

The Scaler has the same functionality as the Scaler Easy, plus further features.

Please refer to the previous page for an explanation of the basic settings.

The **standard stem** weights are automatically filled in if standards stems are defined in the font's hinting settings. In order to make use of this convenience, enter them in File → Font Info → Hinting Settings → Standard stems (T1 hinting) → V stems. Only the first value of each master is considered.

Enter the **italic angle** of the existing glyphs in order to retain the angle even when the glyphs are condensed or extended.
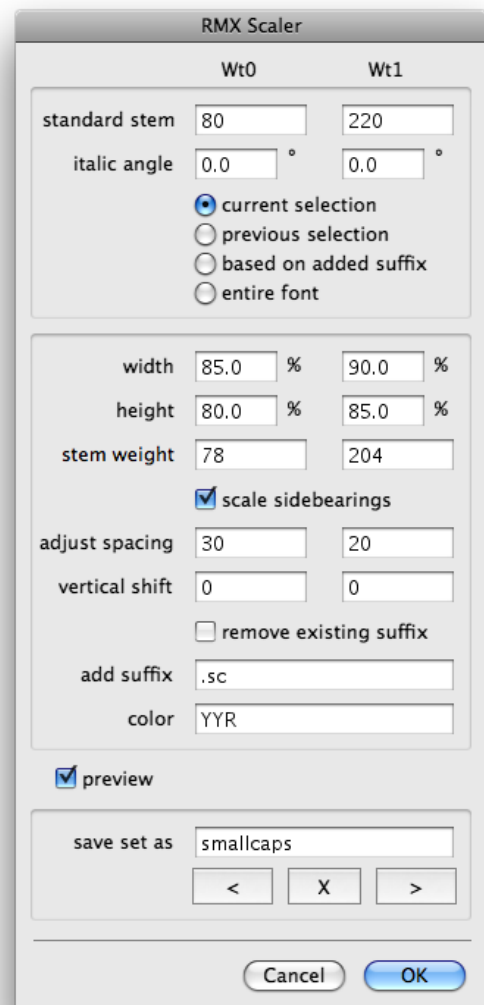
The Scaler allows to scale the **current selection** or restore the **previous selection** that was used the last time the set was applied. Alternatively, the macro can automatically select the necessary input glyphs **based on the added suffix** that is specified below, or scale the **entire font**.

If **scale sidebearings** is not selected, the sidebearings are retained. It is highly recommended to scale the sidebearings in most cases. If the overall spacing is too narrow, use **adjust spacing**.

In case some or all of the input glyphs have a suffix that needs to be removed or replaced, choose **remove existing suffix**.

Enter R G B C M Y or any combination of these letters as the **color** of the scaled glyphs. Note that this is converted to a one-dimensional value internally since FontLab only allows to specify the hue.

It is possible to **save** the set of parameters under the specified name. All sets are saved the file RMX.txt in the same location as the font file. Use the buttons **<** and **>** to browse through the saved sets or **X** to delete current set.

RMX Monospacer

After selecting a number of glyphs in the Font Window, use this tool to create a monospaced version.

It is recommended particularly for automatic generation of tabular figures and symbols.

The **standard stem** weights are automatically filled in if standards stems are defined in the font's hinting settings. In order to make use of this convenience, enter them in File → Font Info → Hinting Settings → Standard stems (T1 hinting) → V stems. Only the first value of each master is considered.

Enter the **italic angle** of the existing glyphs in order to retain the angle even when the glyphs are condensed or extended.

The Scaler allows to scale the **current selection** or restore the **previous selection** that was used the last time the set was applied. Alternatively, the macro can automatically select the necessary input glyphs **based on the added suffix** that is specified below, or scale the **entire font**.

The advance width that all input glyphs are scaled to, the **mono width**, is automatically filled in with a proposed value. This is chosen so that one third of the glyphs will be condensed and the others extended.

The **keep stroke** setting controls in how far the weight of the strokes is retained. Recommended values are 100% for extralight, 90% for regular weights and 60%–70% for bold and black weights.
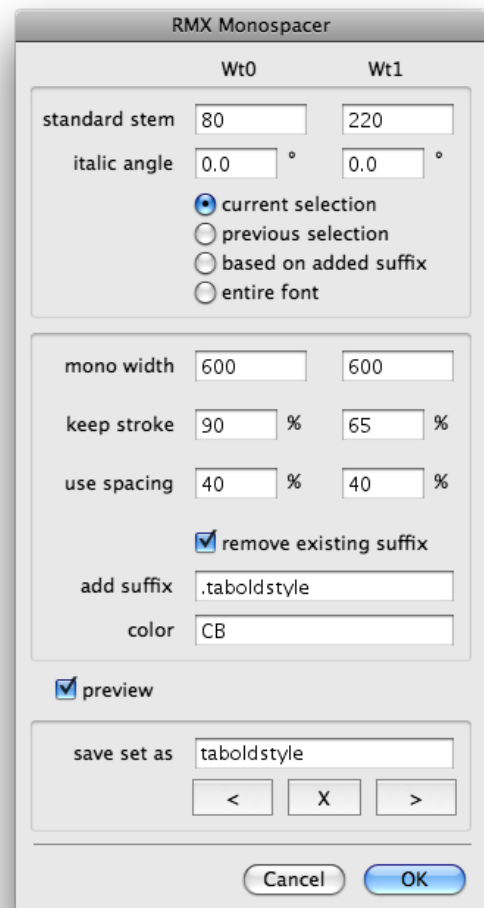
In order to monospace the glyphs, the macro extends and condenses their shape, but it can also **use spacing** to adjust the advance width. This reduces the changes to the horizontal proportions within the set of glyphs but it results in more irregular spacing.

In case some or all of the input glyphs have a suffix that needs to be removed or replaced, choose **remove existing suffix**.

Enter R G B C M Y or any combination of these letters as the **color** of the resulting glyphs. Note that this is converted to a one-dimensional value internally since FontLab only allows to specify the hue.

Use the **preview** checkbox to see what the result will look like. Note that composites will not be treated until OK is pressed.

It is possible to **save** the set of parameters under the specified name. All sets are saved the file RMX.txt in the same location as the font file. Use the buttons **<** and **>** to browse through the saved sets or **X** to delete current set.
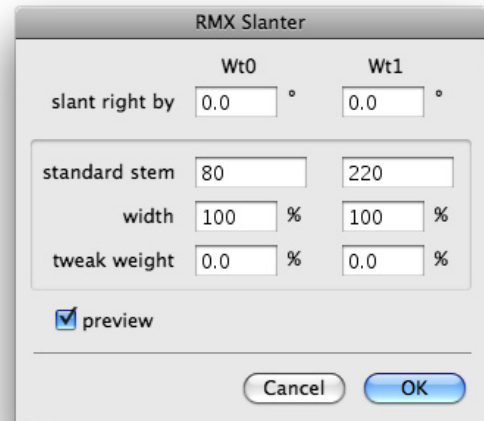
RMX Slanter

This tool slants glyphs while keeping vertical tangents upright.

To **slant right** the glyphs, enter the value in degrees. In order to slant left, enter a negative value.

For MM fonts, the Slanter allows to reduce the **width** of the glyphs, as it is often done for italics, and also to adjust the weight.
The **tweak weight** value does not refer to the absolute stem weights, it represents weight interpolation along the MM axis. See the previous pages for information on the **standard stem** values.

Use the **preview** checkbox to see what the result will look like. Note that composites will not be threated until OK is pressed.

RMX Multi Updater

This tools applies several previously saved sets at once.

Select the sets you want to apply from the list of sets previously saved with the Scaler and the Monospacer.

Note that you need to define and save parameter sets with the Scaler or Monospacer first before you can apply them in the Multi Updater. The sets are saved in the file RMX.txt in the same location as the font file and read from there by the Multi Updater.