PhotoTune
SOFTW▲RE

11612 Linnet Court, Penn Valley, CA 95946

Phone: 530-432-2365

http://www.phototune.com

http://www.SkinTune.com

Email: kirk@phototune.com

Skin Tune ™

Windows & Macintosh

NEW version 2.0

Now 16 Bit Compatible

User Guide

Software License Agreement

Please read this agreement carefully before using the software.

If you do not agree with the terms and conditions of this Agreement, return the software package to PhotoTune, or to the location where you obtained it. By using this software, you agree to be bound by the terms and conditions of this license.

The enclosed computer program ("Software") is owned by PhotoTune Software and is licensed, not sold, to you by PhotoTune Software for specific use under the terms of this license only. The term "Software" shall also include any upgrades, modified versions, updates, additions and copies of the Software licensed to you by PhotoTune Software. PhotoTune Software grants to you a nonexclusive license to use the Software and documentation, provided you agree to the following:

1. LICENSE. This license allows you to: (a) Install and use one copy of the software on a single computer which is not accessible by multiple computers. That same user may also make a copy of the Software to use on a portable or home computer which is primarily used by said user; (b) make one copy of the Software in machine readable form solely for backup purposes; (c) transfer the software from one computer to another provided the software is used on only one computer at a time; (d) permanently transfer (not rent or lease) the Software to another party by providing to such party all copies of the licensed Software along with a copy of this License and the accompanying written materials provided the party agrees to be bound by the terms and conditions of this License, and you may not retain any of the copies of the product after the transfer.

2. RESTRICTIONS. (a) The Software contains trade secrets and may not be modified, translated, reverse engineered, decompiled, disassembled, nor any attempt made to discover the source code of the Software, or create derivative work based on the Software; (b) you may not sublicense, rent or lease any portion of the Software package; (c) notwithstanding any other terms in this License, if the Software is licensed as an upgrade or update, you may only use the Software to replace previously licensed versions of the same software. The upgrade or update does not constitute the granting of a second license to the Software, and you may not transfer the software which is being replaced to a third party.

3. TERMINATION. This License is effective until terminated. This License will terminate immediately without notice from PhotoTune Software or judicial resolution if you fail to comply with any provision of this License. Upon such termination you must destroy the Software, all accompanying written materials, and all copies thereof.

4. EXPORT LAW ASSURANCES. You agree that the Software will not be shipped, transferred or reexported, directly or indirectly, into any country prohibited by the United Stated Export Administration Act and the regulations thereunder or will be used for any purpose prohibited by the Act.

5. LIMITED WARRANTY. PhotoTune Software warrants that the Software will perform substantially in accordance with the documentation, and be free from defects in materials and workmanship under normal use for a period of ninety (90) days from your date of purchase. To make a warranty claim, you must return the entire software package with the original sales receipt to the location where you obtained it within the ninety (90) days. The entire and exclusive liability and remedy shall be limited to the replacement of the Software, or the refund of the purchase price you paid for the Software package.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY PROVIDED BY PHOTOTUNE SOFTWARE. PHOTOTUNE SOFTWARE AND ITS LICENSOR DISCLAIM ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS TO A SPECIFIC TIME PERIOD FOR THE WARRANTY, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

6. LIMITATIONS. In no event will PhotoTune Software any licensor, employee or affiliate of any of the foregoing be liable to you for any consequential, incidental, indirect, or special damages whatsoever (including, without limitations, damages for loss of business profits, business interruption, loss of business data and the like), whether foreseeable or unforeseeable, arising out of the use of the Software, or your inability to use the Software.

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

7. GOVERNMENT END USERS. If the software is supplied to the United States government the Software is classified as "RESTRICTED COMPUTER SOFTWARE" as defined in clause 52.227-19 of the FAR. The United States government's rights to the Software are as provided in clause 52.227-19 of the FAR.

8. GENERAL. This is the entire Agreement between us and supersedes any other communication, advertisements, or understanding with respect to the Software and documentation.

Windows Installation

1.) Double-click on Installer.exe to run the setup program. If the installer can't find Photoshop, use the Choose button to locate Photoshop's Plug-ins Filters folder. It is normally located in c:\Program Files\Adobe\Photoshop\Plug-Ins\Filters.

2.) Next time you use Photoshop, SkinTune will appear as a new menu item under Photoshop's Filter menu. Look for PhotoTune SkinTune.

System Requirements
SkinTune is a Photoshop plug-in, compatible with:

Photoshop 7, CS, and CS2, or Photoshop Elements 2, 3, 4, and 5.
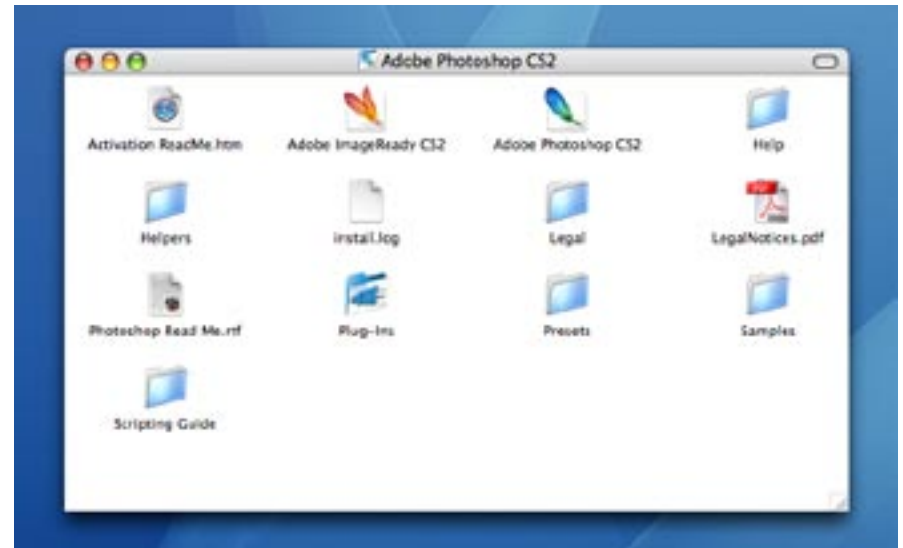
Windows 98 to XP.

Minimum screen resolution of 800x600

8 bit and 16 bit RGB images. File types include Tiff, JPEG, Photoshop, BMP, and PICT.

Macintosh OSX Installation

1.) Move SkinTune and the skin color libraries into Photoshop's Plug-ins folder located in the Applications Folder on your hard drive.

2.) Next time you use Photoshop, SkinTune will appear as a new menu item under Photoshop's Filter menu. Look for PhotoTune SkinTune.

System Requirements
SkinTune is a Photoshop plug-in, compatible with:

Photoshop 7, CS, and CS2, or Photoshop Elements 2, 3, and 4.

Mac OSX 10.2+.

Minimum screen resolution of 800x600

8 bit and 16 bit RGB images. File types include Tiff, JPEG, Photoshop, BMP, and PICT.

Entering Your Serial Number
When you start SkinTune, a dialog box will appear giving you an opportunity to enter your serial number by clicking the Register button. Until a serial number is entered, SkinTune will be restricted to demo mode, which provides 20 tries before timing out.

Skin Color Research

Correcting skin color is one of the most daunting, and time-consuming tasks professional photographers face every day. The problem is that the range of acceptable skin color is very, very limited, and it varies slightly for different races. Additionally, skin color is difficult to render and display on a computer monitor, so making accurate adjustments is almost impossible.

The skin color spectrum is less than 1% of all available colors.

We spent years studying skin color, and collecting thousands of sample images from around the world. Then, we took precise spectrophotometer measurements and compiled a complete reference database of acceptable colors. What we discovered is that skin color represents less than half of 1% of all available colors. So, it's no wonder that correction is such a difficult process, especially when Photoshop's tools were never designed to handle such a small range of colors.

Our next step was to construct complete libraries for different races, including African, Asian, Caucasian, Latin, and Middle Eastern. Each library contains between 120,000 and 150,000 colors made up of different combinations of hue, brightness, and saturation, based on the unique characteristics of each race.

Custom Tools

Understanding skin color was only half the battle. It was obvious that we also needed to create specialized tools designed specifically for skin color adjustment. One thing you'll notice with SkinTune is that all the adjustments are totally independent, so adjusting brightness, as an example, has no effect on hue or saturation. This is important because an adjustment of as little as 1% can easily result in an out-of-gamut skin color.

Most people don't realize that you can't adjust brightness in Photoshop Levels or Curves without altering hue. That is OK under most circumstances, but not with skin color where hue is the most critical component in achieving accurate results.

Finally, we needed to find a way to increase the precision of SkinTune to provide maximum control over the skin color spectrum. Our tools are twice as precise as Photoshop so you can make very subtle adjustments and achieve life-like results. As you can tell, we worked hard to make your job easy.
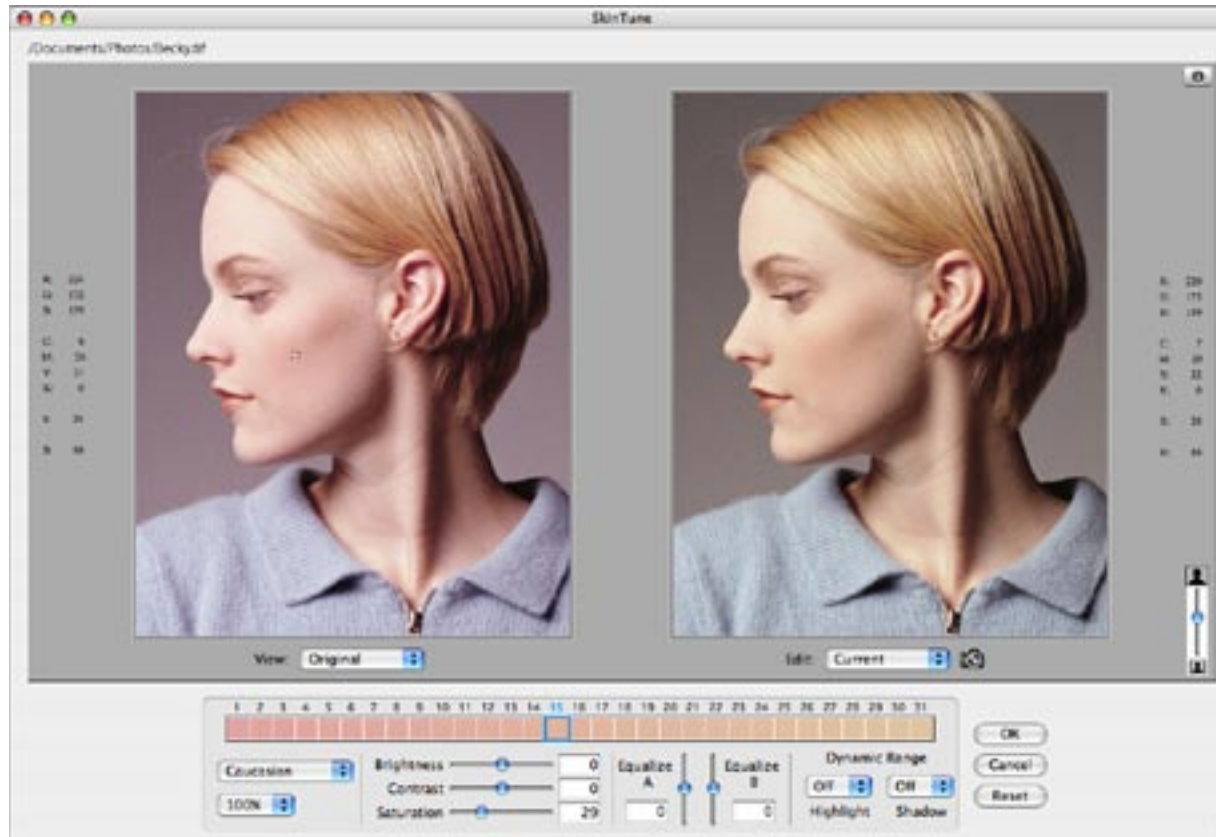
Our Heritage

Like all of our award-winning programs for professional photographers, SkinTune has a unique and elegant interface. Corrections are fast, easy, and mistake-free. With SkinTune added to Photoshop, you can spend more time behind a camera, taking photos, and less time in front of a computer, fixing photos.

Welcome To SkinTune

If you're a fashion, portrait, or wedding photographer, you know first-hand how difficult it is to correct skin color. You tweak, adjust, and experiment with Curves, but the slightest alteration can cause an unwanted color shift.

With SkinTune, all you do is open an image in Photoshop, select PhotoTune SkinTune from the Filter menu, click to select a color, and SkinTune automatically corrects your image. After SkinTune does its magic, you're free to fine-tune the results by adjusting hue, brightness, contrast, saturation, and dynamic range.

New Features & Enhancements

- 16 Bit compatibility. Now, you can open your RAW images in Photoshop and correct them in SkinTune.

- The skin color libraries have been totally rebuilt, and target colors have been refined to offer better results from the start. There is also a new skin color library named All, which is a generic library that encompasses all colors from all nationalities.

- New adjustment sliders have been added and previous functions have been greatly improved. You can now make major edits, whereas the previous version was only capable of minor fine-tuning.

- The Hue range has almost doubled in size to 31 color swatches, providing even greater control.

- Equalize A and Equalize B sliders is a major new feature that helps you precisely fine-tune hue and achieve perfect skin color.

- You can now record up to 4 Snapshots. Plus, new Snapshot management features have been added to deal with the additional features.

- All adjustments have been refined and improved for better color results. Plus, 8 bit and 16 bit adjustments share the same polynomial equations so results will match perfectly.

- New Hand Tool. When you move your mouse over the right-hand preview, a hand tool automatically appears. Just click and drag to pan the image.

- Dynamic Range has been added so you can quickly and easily set highlights and shadows.

- Photoshop selections now preview in SkinTune.

- A single Save History file will work on either an 8 bit or a 16 bit image to simplify your workflow.

- Window Resizing has been added. Just click and drag the bottom right corner of the window.

- When using multiple monitors, SkinTune now opens on only the main monitor.

- The user interface has been totally redesigned and upgraded to accommodate all the new adjustment sliders and tools.
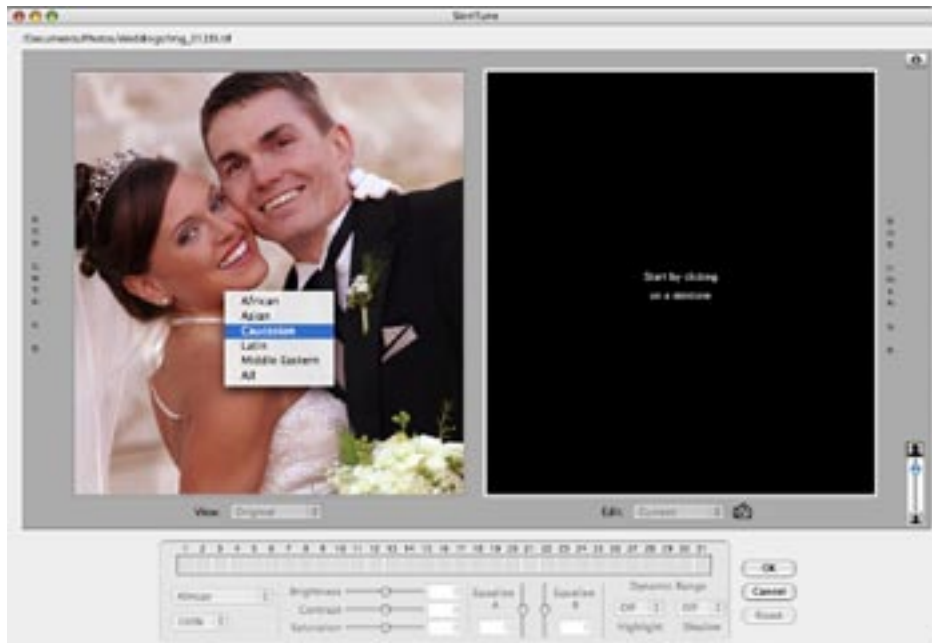
Quick Start Guide

1. To begin, open an image in Photoshop, and then choose PhotoTune SkinTune from Photoshop's Filter menu.

   SkinTune can open 8 bit and 16 bit RGB files.

   When SkinTune opens, a single image is displayed in the left preview area. All the tools are grayed out and inaccessible. Only the Zoom slider and image panning can be used at this time.

2. The first step is to use your mouse to select a flesh tone in the original image. After you click, a contextual menu appears listing the available skin color libraries. Choose a library.

   After selecting a library, a new Current image is displayed, and all the tools are active and ready to use.
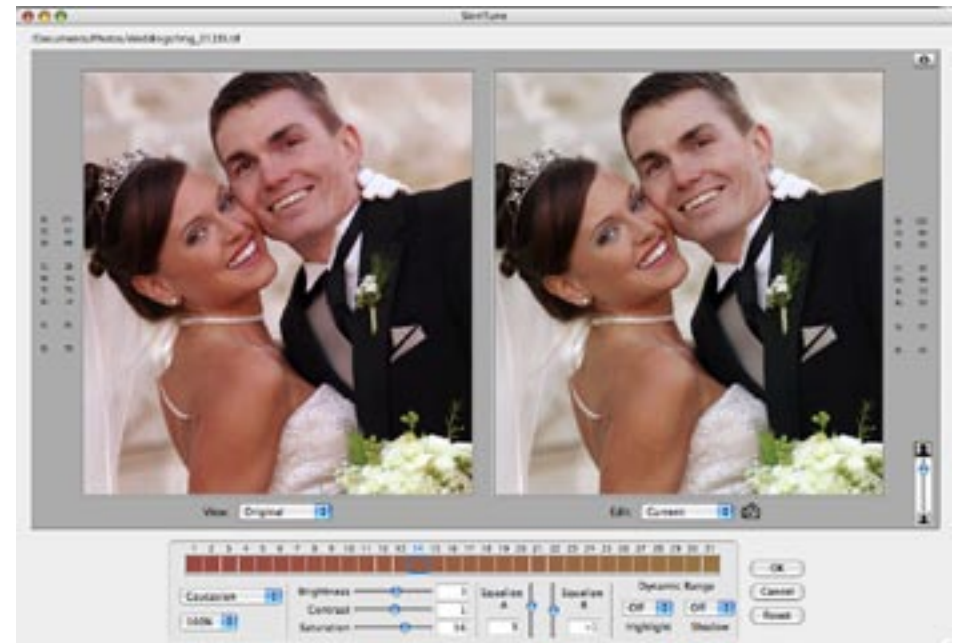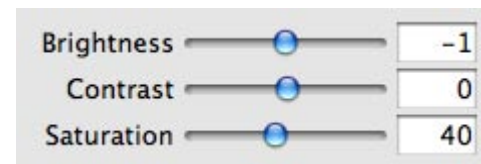

3. You can randomly correct the image using any tool, but the suggested sequence (below) can help produce better results in less time:

   A. First, adjust the Hue by clicking on different color swatches.
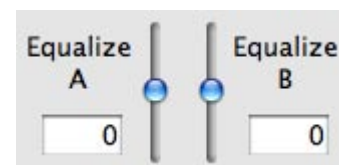

   B. Then, adjust the Brightness slider until you are pleased with the results.

   C. Next, work on Saturation.

   D. Finally, use the Equalize A and B sliders to fine-tune the skin color.

Interface Design

After you click to select a flesh tone, SkinTune displays your Original image alongside the Current corrected image. A complete set of tools lets you fine-tune and perfect the results.

Color Swatches

SkinTune displays a set of colors that can be used to adjust the Current image. The active color is highlighted with a green outline. Click on a different color to choose a new target color.

The color swatches contain different color variants or hues with warm colors to the left and cool colors to the right. Equalize sliders adjust

Race Pop-up Menu

Skin color Libraries for African, Asian, Caucasian, Latin, Middle Eastern, and All are available under the pop-up menu. Each library contains more than 120,000 skin colors.

Percentage Pop-up Menu

SkinTune adjusts your image to the nearest target color in the chosen library, based on your click point. The 50% option cuts the adjustment in half, while 25% reduces the adjustment in half, again. 0% is also available.

Snapshot

The Snapshot command lets you make a temporary copy of the Current preview, along with a record of your corrections. That way, you can compare different results, and experiment with different alterations without losing your prior changes.

The Original and Current Pop-up menus under the preview images control Snapshot functions.
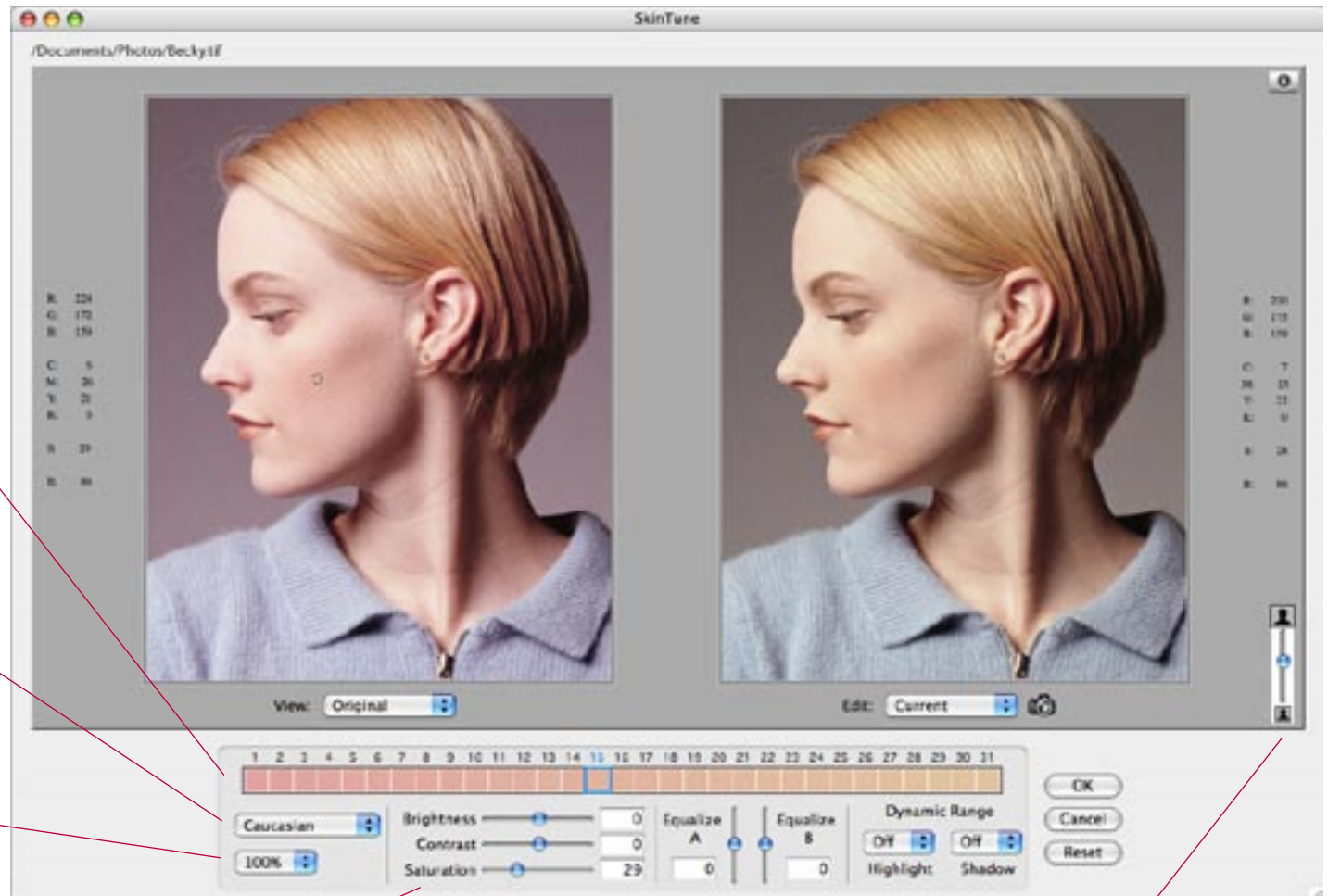
Brightness Slider

The brightness slider uses a custom midtone curve that lightens or darkens the image without data loss. The midtones are affected more than the highlight and shadow regions.

Contrast Slider

The contrast slider uses a custom S-curve that increases highlights, while decreasing shadows.

Saturation Slider

To start, saturation matches the click point of your original image. Adjusting saturation will not effect color or brightness.

Equalize A & B

To the right of the main sliders are the Equalize A and B. These vertical sliders are used to fine-tune the skin color.

Zoom Slider

To begin, the image is always reduced to fit. The vertical Zoom slider lets you increase or decrease the size of the preview images.

Pan Tool

If the image is cropped, you can reposition it using the pan tool. Just place your mouse over the right-hand preview image, then click and drag.

16 Bit Support

Most high-end digital cameras now feature RAW image format as an option to JPEG and Tiff. RAW, as the name implies, is the raw file with no camera processing like sharpening, white balance, or color adjustment. Another advantage of RAW is more pixel data with 16 bits of information per channel rather than 8 bit. Standard 8 bit provides 255 levels of data for each of the three channels in RGB. This equates to 16.5 million different colors. 16 bit increases each channel's data to from 255 to 65,535 levels. 16 bit helps prevent image degradation during manipulation and color correction.

At start-up, SkinTune will automatically recognize 8 or 16 bit images and process them accordingly.

In SkinTune version 2, all adjustments have been refined and improved for better color results. Plus, 8 bit and 16 bit adjustments share the same polynomial equations so results will match perfectly.

Dynamic Range

Many digital images have a flat appearance due to a compressed dynamic range. This happens when pixel values don't extend to the maximum range from 0-255. Dynamic Range converts the lightest pixel to white, the darkest pixels to black, and remaps all the pixels in between. A percentage of pixels on each end of the spectrum are clipped to insure a proper result. Clipped pixels are converted to black or white. The clipping amount is adjustable by selecting one of the five preset clipping amounts in the Highlight Clip and Shadow Clip pop-up menus. You should use the smallest amount possible to avoid excessive data loss, and an overly contrasty appearance.

Our Dynamic Range's default clipping percentage of .02, is twenty-five times less than Photoshop's default setting. And, our Dynamic Range does not alter the color balance.

Note: Highlights on a face can become too burned-out, so use judiciously.

Contrast

The contrast slider uses a custom S-curve that increases highlights, while decreasing shadows. An S-curve is the preferred method of professionals. The available range is -50% to +50%, in 1% increments.
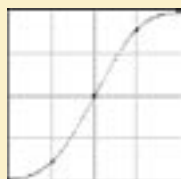
SkinTune's Contrast uses a custom S-curve adjustment, with highlights moving in the opposite direction of shadows. This method is designed to prevent data loss. On most images, you'll find that a 1-5% increase will provide the necessary "snap" to improve contrast.
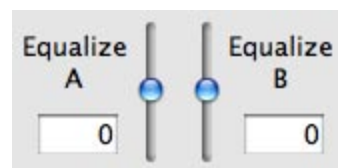
Equalize A & B

New to SkinTune version 2, are the Equalize sliders. These sliders are used to fine-tune the color obtained from the Hue Swatches. Moving the Equalize sliders up will increase the warmth, while moving either slider down will produce a cooler image.
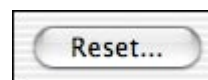
Reset Button

When you click on the Reset button, SkinTune reverts to the original settings that were applied when you last clicked on the original image with the eye dropper tool.

All the adjustments you have made will be lost, unless you make a Snapshot or Save History before clicking reset.

Sound Effect

When you make a Snapshot, a camera shutter release sound is played.

If you want, you can turn the sound effect off:

1. Start SkinTune.

2. Click the About button on the top right corner of the window.

3. After the About box appears, click the speaker button located on the top right corner of the About box.

This will change the default, so the sound effect will remain off unless you turn it back on.

Window Resizing

Window resizing is a new feature added to SkinTune version 2. Just click and drag the bottom right hand corner of the window with your mouse to resize the window. The standard close, maximize, and minimize buttons have also been added to the top of the window.
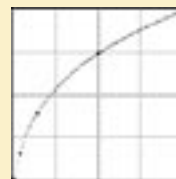
Color and brightness adjustments use an exclusive curve adjustment, as shown here. This method is designed to prevent data loss. The largest change occurs in midtone and shadow areas that contain the highest levels of saturation, with a less pronounced effect in the highlight areas.

Click-Points

Your flesh tone selection is an important first step in achieving good results. Here are some things to consider:

1. Select a mid-tone color. Choose an area that is a good representation of the average color, brightness, and saturation of the image.

2. If the overall skin color in your image is too red, as an example, click on an area that contains this color cast so SkinTune can try to fix it.

3. Avoid shadows and highlights.

4. Avoid facial hair and make-up.

5. The program takes a 7x7 pixel average based on your click point, so choose a smooth, uniform area.

6. At any time, you may select a new click-point, which will reset the results.

Checking Your Selection

After you make a selection, check to make sure you are within range.

Based on your click-point selection, Skin-Tune finds the nearest acceptable skin color from the library. If the Current image comes up looking bad, it is an indication that your click-point fell outside the boundaries of the library. The solution is to click on a different area of the face until a more desirable Current image appears. See the section above regarding click-points.

Be sure to click an area that puts the satura-tion and brightness sliders towards the middle of the slider instead of the ends. On an overall light image choose a darker area, and on a dark image choose a lighter area. That way you will avoid the boundaries of the library and make the correction a midtone adjustment. Whenever you are near the mini-mum or maximum values, whether in Photoshop features or with SkinTune, the adjustment range will be restricted and provide less quality.

Next, understand that your click-point selection is just the beginning of the correction process. This first step is required, because SkinTune needs a target point from the library to set all the sliders and parameters. The library data is used
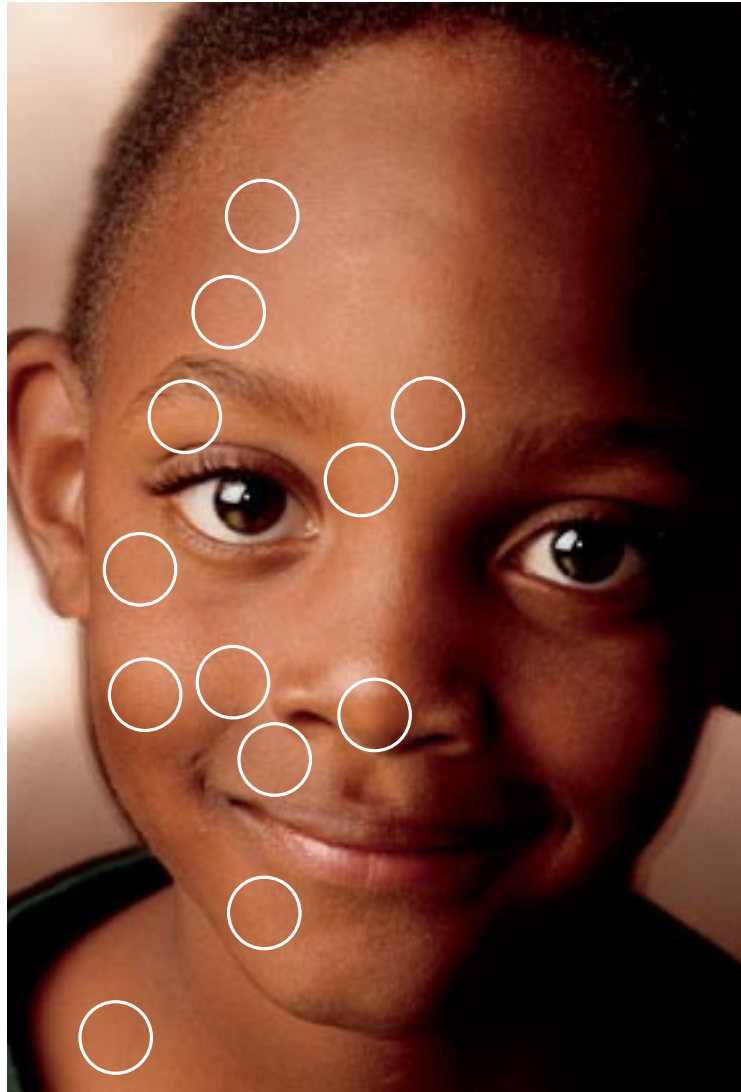
to control all the subsequent adjustments you make.

Your click-point selection is used to set Hue, Brightness, Saturation, and Equalize. When you adjust any of these, SkinTune refers to the specific data regarding the nationality. Each library is compiled from thousands of skin tone samples.

The hue range is displayed on the color swatches, with current target color high-lighted. You can click to select a new target color. Again, stay away from the 4 or 5 color swatches located on the far right and left edges. These hues are only provide to give you a larger working range and they fall outside the actual skin color spectrum.

The available spectrum for skin is very, very, limited, so minor adjustments are usually all you need. SkinTune's hue adjustment offers twice the precision of Photoshop.

![Camera icon] **Using The Snapshot Function**

The Snapshot button (camera) is located under the right-hand preview image. You can record up to four Snapshots of your work. After that, you will be prompted to replace a Snapshot whenever you make a new Snapshot.

 A Snapshot makes a temporary copy of any state of the image, and lets you work from that point forward. In this way, you can experiment, or compare different effects while retaining a copy of your previous edits.

For example, you can make changes and tweak colors, take a snapshot, and then display and compare different versions side-by-side. Then, take another Snapshot any time you have made an improvement, so you can recover your work easily. Just select a Snapshot from right-hand pop-up menu to recall the previous saved version.

The "View" and "Edit" pop-up menus, located under the preview images, are used to control and manage the Snapshot functions. When a Snapshot is selected from the right-hand pop-up menu, the sliders are updated to reflect the adjustments saved with the Snapshot. Only the right-hand preview can be edited. Displaying a Snapshot in the left-hand preview is for display purposes only.

The pop-up menus contain the following items:

Left Menu	**Right Menu**
Original	Current
Snapshot 1, 2, 3, 4	Snapshot 1, 2, 3, 4
	Save History...
	Load History...

Managing Snapshots

Every time you make a Snapshot, it is listed in both pop-up menus located under the preview images. You can use the pop-up menus to display any combination of Snapshots you'd like. Only the preview image on the right can be edited and altered with the sliders. Whenever a Snapshot is displayed on the right, the sliders are updated to show the recorded adjustments that were saved with the Snapshot. You could load Snapshots on both the left and right, so you can compare two images side-by-side while you make changes.

If you make changes to a Snapshot, and then switch to a different Snapshot, SkinTune will ask if you want to save the changes before you switch.

If you want to make a new Snapshot, and you've used up your allotment of 4 Snapshots, SkinTune will ask you which of the current Snapshots you want to replace.

Typical Workflow

Like everything in SkinTune, Snapshot is designed to speed up the correction process. Snapshot is a safety net that lets you continue experiment with different combinations without losing your previous edits. Take a Snapshot whenever you want to preserve a set of correction parameters so you can continue experimenting with impunity. Here's a typical workflow using Snapshot:

1. Make your normal adjustments.
2. Take a Snapshot to record your adjustments.
3. Then experiment with other edits, and make another Snapshot.
4. Use the pop-up menus to compare different Snapshots.
5. Save History if you want to reuse your changes on a future image, or click OK to process the changes shown in the right-hand preview.

Save History and Load History

Snapshots are a temporary record of your image adjustments. But, you can permanently save an unlimited number of Snapshots to disk. To save on your hard disk, choose the Save History option in the Current pop-up menu, and specify a name and location for the file. Use the Load History option to open a previously saved setting. Load History will overwrite and become the Current preview. Then, you can edit the Current image using all of the tools in SkinTune.
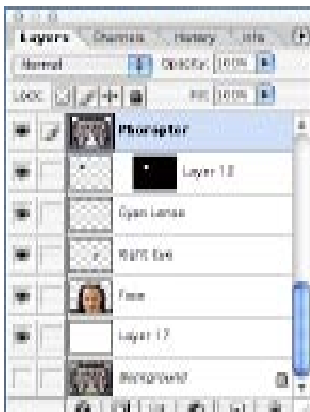
Using SkinTune With Photoshop
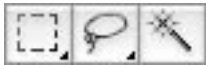
To use SkinTune on selected areas
1. Choose one of Photoshop's selection tools from the tool palette, and select a portion of the image.

2. Open SkinTune, and make changes as you normally would. The corrections will only be applied to the selected areas.


Photoshop Layers
Photoshop lets you place artwork on separate layers to make the construction of composite images easy. SkinTune is designed to work with Photoshop layers, so you can color correct individual elements separately.

To use SkinTune with layers
1. Display the Layers palette (choose Window>Layers).

2. To activate a layer and work on its contents, click on the appropriate layer name listed in the Layers palette. The layer is highlighted to show that it has been selected. Then, open SkinTune.

3. To work on a portion of one layer, select the layer as described above and use a selection tool to select a portion of that layer. Next, open SkinTune. The adjustments will be applied to the selected area.
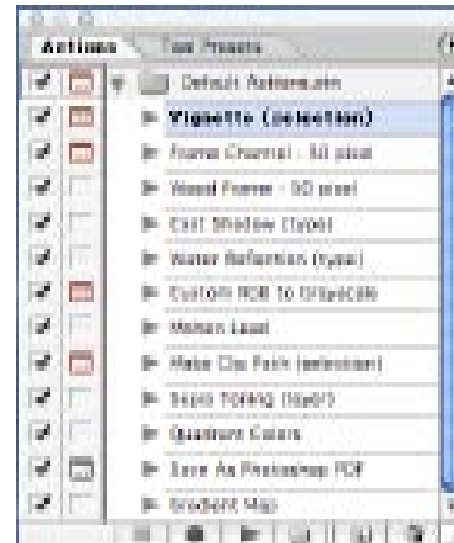
Batch Processing
SkinTune supports Photoshop's Action Palette, so multiple images can be processed automatically, with SkinTune's functions.

Using Photoshop's Actions
1. From within Photoshop's Action Palette, start a new Action.

2. Photoshop will record every step, including SkinTune functions, so they can be replayed on an image or a batch of images automatically.

3. To replay the action on a single image, select the action in the action palette, and select "play."

To replay the action on multiple images, choose Automate>Batch from Photoshop's File menu. A dialog lets you select an action, choose a folder of images to process, and set other parameters for opening, closing, and saving files.

Last Filter
SkinTune supports Photoshop's Last Filter command located at the top of the Filter menu. This lets you replay SkinTune's last correction on other images. The menu item is available until you use a different filter.

Fade
SkinTune supports Photoshop's Fade command, which is located in the Edit menu. This allows you to reduce the effect of SkinTune's last adjustment from 0-100%. The Fade command is similar to changing the layer opacity in Photoshop's Layer Palette.