Portrait Professional
User Manual

Version 11.1

Anthropics Technology Ltd

www.portraitprofessional.com

Table of Contents

Part I

1   Getting Started

Introduction

Portrait Professional is the easiest and fastest way to re-touch portraits, allowing you to achieve professional results in minutes.

Portrait Professional works in a completely different way to ordinary airbrushing and photo editing software normally used by the pros. Portrait Professional has been trained with hundreds of examples of human beauty, and as a result you can add as much or as little photo enhancement as required - by simply moving sliders.

In fact due to the innate knowledge of human beauty built into Portrait Professional, the highest quality photo touch-up can be achieved by anyone in just a few minutes.

Portrait Professional is available in three editions 9, Standard, Studio and Studio64. All editions are covered by this manual.

Portrait Professional is available for Windows and Mac computers. This manual is for the Windows Portrait Professional.

Getting Started

Take a look at the Quick Start Guide 7 to see a quick overview of how to use Portrait Professional.

The Step By Step Guide 12 provides more detailed information about each step.

If you need further help, please visit www.portraitprofessional.com/support where you see the latest FAQ, and access our support ticket system. The support ticket system lets you send a question to our support staff.

1.1 Quick Start Guide

Portrait Professional will guide you through the process of enhancing a face. You can use this quick start guide to familiarize yourself with the stages.

Select the image to enhance

When you open Portrait Professional, you will get the welcome screen.

Click on the **Open** button, or select *Open...* from the *File* menu. This brings up the file open dialog where you can select the image you want to load.

If you don't have an image to hand, you can click on one of the example pictures instead.

Portrait Professional will load your image and show it in the main working area, and then automatically find all the faces in your image.

Select the face you want to enhance

The next step depends on how many faces are automatically detected in your image.

If one face is detected

The Select Gender 54 dialog appears, showing the outline around the face that was found.

If the outline is shown correctly around the face, press the **Female** or **Male** button to select the gender (or **Girl** or **Boy** if the face is that of a young child). This will take you to the next stage where you can check and make changes to the outlines.

If the outline is not shown correctly around the face, press the **Discard Outlines** button. The outlines will be deleted, and you will then be asked again to select the gender of the face you want to enhance. Once you have selected the gender, you will need to manually locate the face 15.

If more than one face is detected

You will be shown all the faces that were detected. You can select one to enhance 13, or you can manually locate a face 15 if one was not detected automatically.

After enhancing the first face, press the Other Faces button at the Enhance Face 21 stage to return to the Select Face 13 stage where you can select the next face to enhance.

If no faces are detected

If no faces are detected automatically, a dialog will appear to let you know. When you close that dialog, you will be at the start of the process to manually locate the face 15.

Manually Locating A Face

If a face you want to enhance is not detected automatically, you will need to locate it manually 15.

View the enhanced image and fine tune the results

Once you have selected a face (and adjusted the outlines if necessary) you will be taken to the Enhance Face 21 stage.

You will see the original portrait on the left of the screen and the enhanced version on the right (you can change this using the *View Before And After* and *View After Only* tabs above the picture).

Hold down the ENTER key to flip between the before and after picture to see the improvements.

If you are happy with this initial enhancement, you have just finished retouching your first picture using Portrait Professional. However, you can very quickly and easily fine tune any of the enhancements using the controls on the right hand side of the screen, to get any result you want from heavily airbrushed glamor effects to natural beauty.

At any time, you can now save your enhanced portrait by selecting "Save" from the File menu 26 at the top left of the screen.

You can also save the whole project by choosing "Save Session" – this allows you to come back and edit the portrait at a later time.

Occasionally, inaccurate positioning of the face points can cause problems such as distortion of the face or lips. To correct this, you can adjust the outlines that are shown on the *Before* view. As you drag points around in the *Before* view, you can immediately see what effect these changes are having in the *After* view.

If there is more than one face in the picture, press the "Other Faces" button to go back to the Select Face 13 stage.

1.2   Top Tips For Best Results

If you just read one page in this manual, make it this one to get the best results out of Portrait Professional.

Move points as little as possible

When adjusting the outline ⌐18⌐, move points as little as possible to get them to the right place.

For example, when moving the points around the mouth, or around the face, just move them in or out to get them on the perimeter. Try to avoid moving the points around the perimeter.

The exception is corner points. The points at the corners of the eyes, or the corners of the mouth must go in the right place.

Don't push the sliders up too far

Often, you can greatly improve a picture with fairly subtle changes.

Push the sliders up just far enough to get the results you want.

If you go too far, the result can look unnatural or faked.

Don't use the sliders to fix small blemishes

You can avoid the need to push the sliders up too far by using the Touch-Up ⌐38⌐ tool to clean up spots and blemishes. This is better than pushing the sliders further up because that affects the whole face.

Make sure the skin area is right

Portrait Professional automatically works out which areas in your picture are skin. However, the automatic area selected can sometimes be adjusted to improve the results.

Use the skin Extend and Cut Back ⌐52⌐ tools to paint over any skin areas that are wrong.

1.3   Portrait Professional Editions

Portrait Professional comes in three editions, Standard, Studio and Studio 64. The Standard edition is intended for more casual users or amateur photographers. The Studio edition is intended for enthusiast or professional users. The Studio and Studio 64 editions have all of the same features. The difference is that while the Studio edition is a 32-bit application, Studio 64 is a 64-bit application. This means it has access to all of the memory in your computer and so can handle larger images.

The Studio 64 edition can only run on a 64-bit edition of Windows. The Studio edition can run on both 32 or 64-bit editions of Windows.

This manual covers all editions, with features that are only available in the Studio/Studio 64 edition indicated like this:

Studio Edition Only

The main differences between the Standard and Studio editions are listed below.

Photoshop plug-in support ⌐60⌐	The Studio edition comes with a Photoshop plug-in component. This allows you to open an image in Portrait

	Professional Studio directly from within Photoshop. When you have finished enhancing the image in Portrait Professional, the result is automatically loaded back into Photoshop.
Read RAW image files 74, and Adobe DNG files	Only the Studio edition can read RAW image files and Adobe DNG files.
16 bits per color sample support (48 bits per pixel)	The Studio edition can work with images containing 16 bits per color sample (48 bits per RGB pixel). The Standard edition is limited to 8 bits per color sample (24 bits per RGB pixel). RAW images typically contain more than 8 bits per color sample, so the Studio edition allows this extra information to be preserved. The Studio edition can read and write TIFF files containing 16 bits per color sample. The Standard edition cannot. The JPEG file format does not support 16 bits per color sample, so if an image containing 16 bits per color sample is saved to a JPEG file, it will automatically be converted to 8 bits per color sample.
Color profile support 58	Images can contain extra information about the "color space" that is used by the RGB color values. If this information is ignored, the colors that appear on the screen, and the colors in any file saved out may not be correct. Only the Studio edition reads, writes and applies this color space information.
Improved work-flow when enhancing multiple images 65	The Studio edition allows you to select multiple files using the file browser to set up a list of files to work through. This speeds up your work-flow, since you can use a single command after enhancing each image to save the result and load the next one.

Part II

2 Step By Step Guide

This section of the manual describes the various stages that you may need to go through when you use Portrait Professional.

The most important stage is the <u>Enhance Face</u> 21 stage, which is where you view and can adjust the enhanced image.

Most of the other stages are only needed if the automatic face detector did not find the face in your image correctly, or if you are enhancing a group shot with several faces in one image.

2.1 Open An Image

The Portrait Professional Welcome screen

When you run Portrait Professional, it begins with the welcome screen:
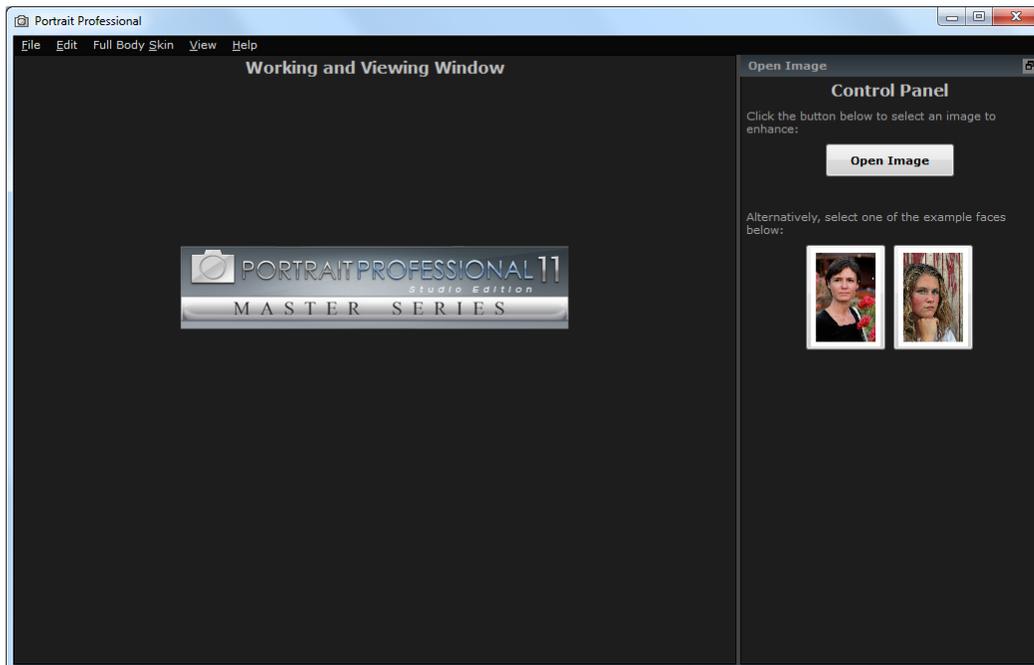
Open an image

To open an image to enhance, either:

- Press the **Open Image** button, or
- Select the *Open* command in the <u>File menu</u> 26.

This will bring up the File Open panel:

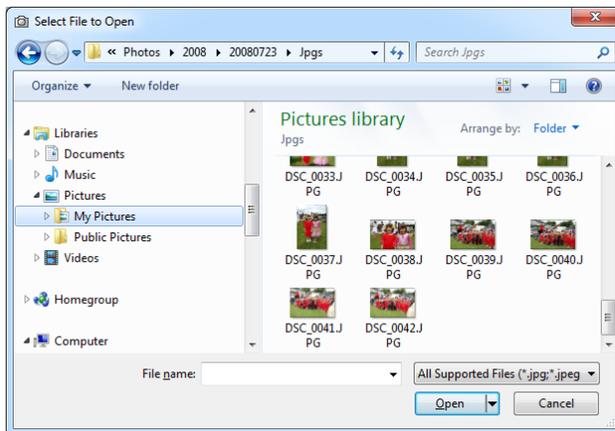Browse to the file you want to enhance, and press the Open button.

Image types that Portrait Professional can open 74.

Alternatively, click on one of the example images if you want to try the application and don't have any suitable images to hand.

2.2   Select Face To Enhance

After you have opened an image, Portrait Professional shows the image in the Select Face stage.

You can also return to this stage at any time by selecting the *Enhance Another Face In This Photo* command in the *File* menu, or by pressing the **Other Faces** button in the toolbar at the Enhance Face 21 stage.
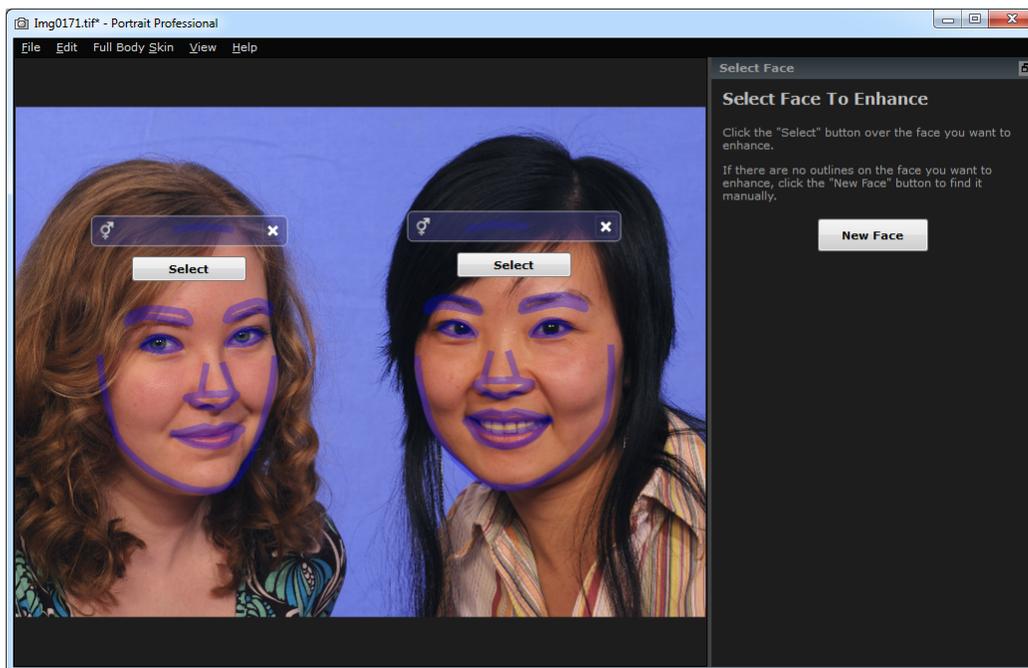
If exactly one face was detected, the Select Gender 54 dialog will be shown that will take you straight to the Enhance Face 21 stage.

Otherwise, outlines will be shown around each face detected. Press the **Select** button over the face to enhance that face. You will be asked to select the gender for that face, and then you will be taken to the next stage where you can check and adjust the outlines 18.

If you come back to this stage after a face has already been enhanced, you will see an extra button over the face called **Adjust Outlines**. Press this button to go the stage where you can adjust the outlines. The **Select** button will take you straight to the Enhance Face 21 stage when the face has been selected before.

Sometimes, you may find that a face has been detected in part of the image where there is no face. You can just ignore these extra faces, since no changes will be made to that part of the image provided you don't select that face. You can always delete any set of outlines around a face by clicking on the cross at the top right of the face.

Enhancing a face that was not detected automatically

If the face you want to enhance was not detected (so there are no outlines around it), press the **New Face** button in the control panel. This will let you locate a face manually.

Controls for each face

For each face that has been located (whether automatically or manually), the outlines will be shown around that face.

In addition, a header bar will be shown above the face, and below this, the **Select** and **Adjust Outline** buttons.

The header bar will be blue for faces that have not yet been enhanced, and green for those that have.

Control	Description
Gender Indicator/Selector	This is shown at the left of the header bar. Click on the gender symbol to bring up a menu that lets you set the gender of the face. Portrait Professional needs to know the gender of the face since it has been trained separately on what makes female and male faces attractive.
Delete Button	This is the cross at the right of the header bar. Press this to delete all the data that Portrait Professional has stored for this face.
Select Button	Selects the face to be enhanced. The first time a face is selected, this will take you to the Adjust Outlines 18 stage where you can view and adjust the outlines. If the face has already been enhanced, you can press this button to make further changes.
Adjust Outlines Button	This button only appears if the face has already been enhanced. It lets you make changes to the outlines around the features. Note that you can also adjust the outlines at the Enhance Image 21 stage, but you may prefer to make these changes in the Adjust Outlines 18 stage where you are also shown how the outlines should be positioned in a reference image.

Gender symbols

The gender is shown using one of the following symbols:

Gender not set. If either the Select or Adjust Outlines buttons are pressed when the gender is not set, the Select Gender 54 dialog will be shown so that you can set the gender before going to the stage requested.

Gender is female.

Gender is male.

Gender is female, and the face is a girl younger than about 12 years old.

Gender is male, and the face is a boy younger than about 12 years old.

When one of the child genders is selected, this will reduce the changes that can be applied to the shape of the face, since generally changing the shape of a child's face is undesirable.

2.3   Manually Locate A Face

If the face in your image was not detected automatically, you will need to locate it manually.

To locate a face manually, you first need to press the **New Face** button at the <u>Select Face</u> 13 stage.

This will first ask you to set the gender for the new face, as described below.

Select the gender

Portrait Professional needs to know the gender of the face being enhanced. This is because some of the enhancements depend on the gender to give the best result possible.

Press the **Female** button if the face is female (keyboard shortcut: **f**).

Press the **Male** button if the face is male (keyboard shortcut: **m**).

If the face is a child (under about 12 years old), check the **Child** checkbox. This will improve the results when enhancing children.

Portrait Professional will automatically advance to the next step once you have selected the gender.
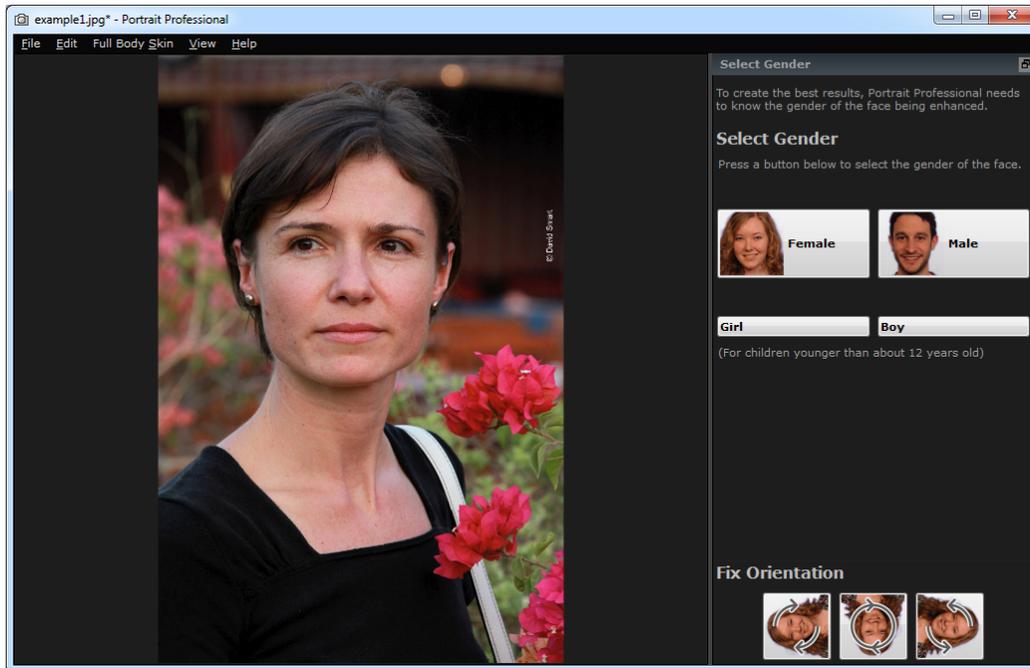
Enhancing skin only

If there is no face in the picture, press the **Enhance Skin Only** button. When you press this button, you will then be asked to select the skin area by painting over it using brush tools.

This option is only intended to be used if you want to use the skin enhancing when there is no face in the picture. If there is a face, you will get much better results if you select the gender and follow the usual steps to position the lines over the face. This will also usually be quicker since the skin area will be automatically selected.

If the Enhance Skin Only button is not shown, you need to enable it using the **Show "Enhance Skin Only" Button** check-box in the General Settings 56 dialog.

Adjust the image orientation

If your image is not the right way up, click on one of the buttons at the bottom of the controls panel. This will rotate your image in the direction shown by the arrows.

Note that you need to change the orientation before selecting the gender, since Portrait Professional automatically advances to the next step when you select the gender.

Locate 5 key features on the face

After you have selected the gender, the next step is to locate the positions of 5 key features on the face.
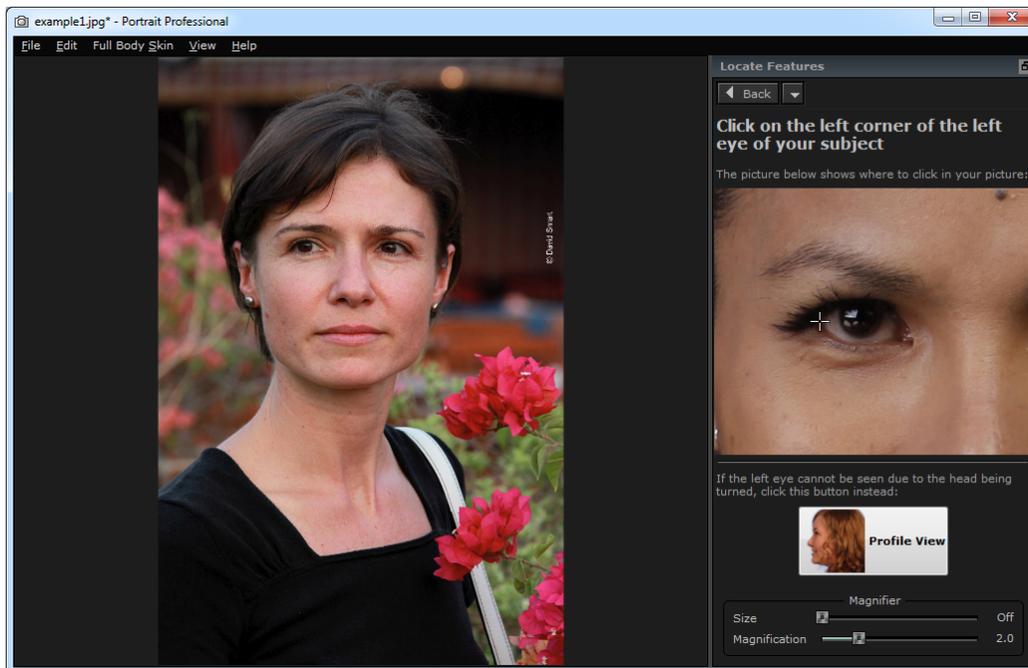
The 5 key features are:

Locating the feature points

As you click on each point, Portrait Professional will automatically move on to the next point.

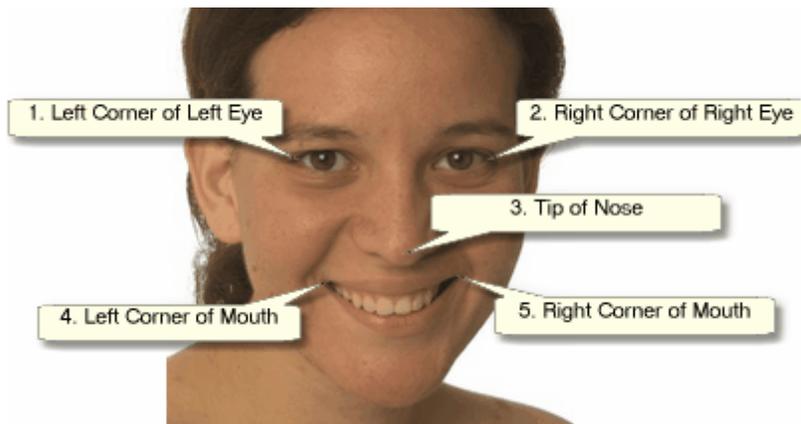You will be shown an example image to help you know where to place each point.

You can adjust the position of any points you have already marked by clicking on one of those points and dragging it.

The cursor will have a small text label next to it to remind you which point you are locating. These labels can be turned off if you don't like them using the General Settings 56 panel.

Zooming In

To help you to position the points more accurately, you can hold down the CTRL key to zoom in on the cursor.

Profile views

If the face is viewed side on, press the **Profile View** button at the bottom of the control panel.

If you are not sure whether the face is being viewed in profile or not, the main test is whether you can see both eyes. If you can't see one of the eyes due to the head being turned, press the Profile View button.

When you press the Profile View button, you will only need to locate one eye point, the nose tip, and one mouth point.

Adjust the outlines

After you have located the 5 key features, Portrait Professional will automatically place the outlines over the face and show you the outlines in the Adjust Outlines 18 stage.

If any of the outlines are misplaced, correct these by moving the control points, before pressing the **Next** button to go to the Enhance Face 21 stage where you can view and adjust the enhanced image.

2.4 Adjust The Outlines

Viewing and moving the outlines

The **Adjust Outlines** stage shows the outlines around the current face, and lets you adjust their positions.

This stage is reached after selecting the gender of a face that has been automatically located, or by pressing the Adjust Outlines button over a face at the Select Face 13 stage, or as one of the steps when manually locating a face 15.

If any of the outlines are not shown correctly around the features of the face, they should be moved to the correct place. A reference image in the control panel shows how the outlines should be positioned.
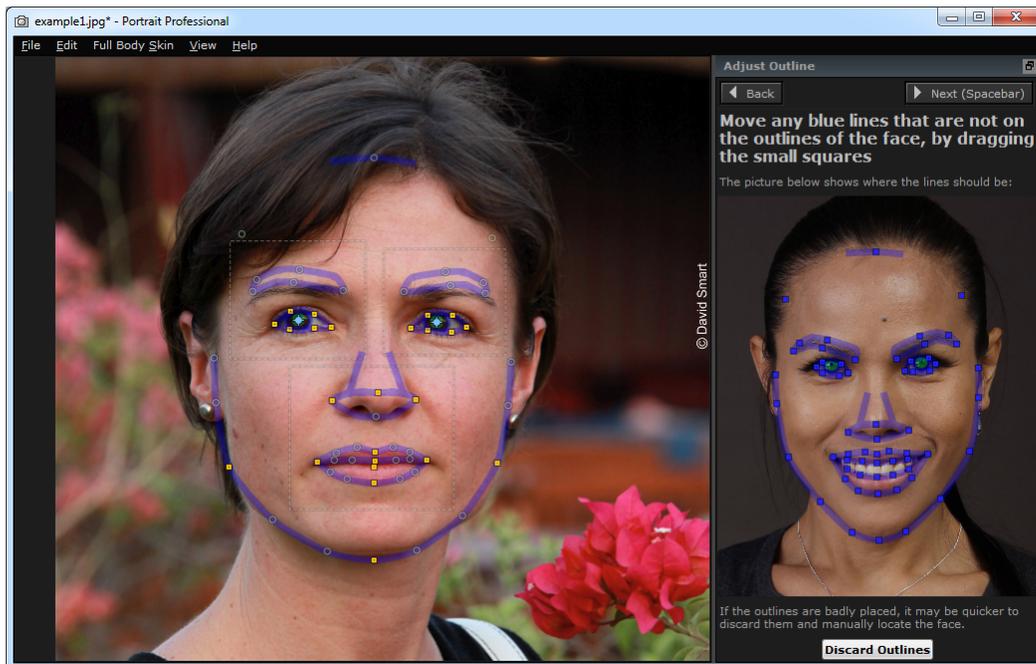
Adjusting the outline

The outline is shown as blue lines overlaid over your image in the main working view. The lines can be moved by dragging the control points.

The control points are shown differently depending on how they were set:

- The **small yellow squares** - these are points that have been placed by the automatic feature finder. If any of these points are in the wrong place, you will need to move them manually to the correct place.

- The **small blue squares** - these are points that you have placed.

- The **light green circles** - these are points that have been automatically placed based on where the other points are. Any of these points may move if any other points are moved.

Whenever you drag a control point, it will turn into a blue square to let you know that it is a point that you have positioned.

> For best results:
>
> - Try to move as few points as possible to line up the outline.
>
> - Any points you do move, try to move as little as possible. If you spend a long time carefully adjusting every point, not only are you wasting time, but you are likely to end up with a worse result.
>
> - Start by moving points that are already fixed - those shown as small yellow or blue squares. The more points you can leave as small green circles, the better.

To adjust the outlines around the eyes or mouth more accurately, click inside the dotted rectangles to zoom in on that feature. Click again to zoom back out.

Once the outlines are correctly positioned (or if no adjustment is necessary), press the space bar or click on the Next button.

▶ Next (Spacebar)
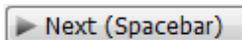
Adjusting the iris and pupil outlines

Two circles are shown inside the eye. The smaller (green) circle should fit around the pupil (the black part in the middle of the eye). The larger (blue) circle should fit around the iris (the colored part of the eye). These circles are positioned automatically, so you will not usually need to adjust them.

To move the circles, drag the point in the center of the circles.

To resize the circles, drag the outline in or out.

If the iris is not exactly circular, you can drag on the four small blue squares on the iris outline to make it an ellipse.

If the center of the iris and the pupil are not exactly the same, you can move the pupil independently of the iris by first clicking on the pupil circle, and then dragging the center point. To go back to moving the iris and pupil together, either click on the iris circle, or move the cursor away from the eye and back again.

Adjusting the outline for each feature

For greater accuracy, you can ask Portrait Professional to show a zoomed in view of the main parts of the face to make it easier to check the positions of the outlines. This is done by clearing the **Skip Zoomed In Steps**

When Adjusting Outlines check-box in the General Settings 56 panel.

This will happen automatically for profile (side-on) faces regardless of this setting, since the automatic feature finder does not support profile views.

Portrait Professional will take you to each of the features in turn so that you can check, and if necessary, adjust the positioning of the selected outline of each feature.

The features are shown in the following order.

Left eye and eyebrow

The left eye outline is set automatically. If it does not go correctly around the eye, adjust it by moving the control points.

Depending on the shape of the eyebrow, it can be difficult to get the outline to fit around the eyebrow. In these cases, it is best to not worry about it and just get the position roughly correct. Even if you are able to get the outline to fit around the eyebrow reasonably well, if you had to move the points a lot to get it to fit, you may get a better result by moving the points less even if the eyebrow outline no longer goes around the eyebrow accurately.

Right eye and eyebrow

The same comments about the left eye and eyebrow apply to the right eye and eyebrow.

Nose and Mouth

When you get to this stage the Mouth Open Or Closed panel will appear, provided it has not been turned off in the General Settings 56. This panel has two buttons:

Mouth Open	Press this button if the mouth of the face you are enhancing is open. You will then see four lines between the corners of the mouth. The top two should be positioned around the upper lip, and the bottom two around the lower lip. If the line along the bottom of the top lip is placed close to the line along the top of the bottom lip, you will see the line along the top of the bottom lip disappear leaving just the control point in the middle. The mouth will then be treated as closed anyway.
Mouth Closed	Press this button if the mouth is closed. You will then see only three lines between the corners of the mouth. The center line should be placed along the line where the lips meet.

🚩	If you are used to pressing the spacebar to quickly move on to the next stage, note you can also use this to dismiss the dialog asking if the mouth is open or closed. If this happens, the mouth will be selected as being open. If the mouth is in fact shut, you can either press the Back button followed by the Next button, and the panel will appear again, or you can simply move the middle two lines together.

Face outline

The face outline does not need to be set accurately. The same rule applies here, that you will get the best results if you only move those points that need it, and move those as little as possible.

Try to avoid moving the face outline points around the face, just move them towards or away from the center of the face.

Once you have been through all the features, press the Next button one more time to start Portrait Professional processing your image. You will then be taken to the Enhance Image 21 step, where the fun begins!

2.5   Enhance Face

After you have adjusted the outline around the face in your image, you are ready to start enhancing the face.

Viewing the result

You can choose whether you want to see the before and after image side by side, or whether you just want the enhanced image as large as possible. Use the tabs above the images to select which option you prefer.

Whichever option you use, you can always flip the enhanced ("after") image back to the original ("before") image to see the changes by pressing and holding the Enter key.

Changing the result

Portrait Professional will automatically enhance your image when you reach this stage. See Saved Sliders 33 for how to configure this default enhancement.

You can change how the image is enhanced by moving the sliders in the Controls panel 30.

The sliders are grouped into sections that control various aspects of the face. When you first enter this stage, the Face Sculpt Controls 36 and Skin Controls 38 sections are open, and the others are closed. Sections can be opened or closed by clicking on their title button. This has a small triangle pointing down if the section is open, or right if the section is closed.

Try moving the **Master Fade** slider in each section to get an idea of the overall effect controlled by that section.

The lower sliders in each section give you finer control over the effect.

Portrait Professional also comes with a set of Saved Sliders 33 settings, which set some or all of the sliders to pre-defined values to get a particular effect. You can go through these to see some of the types of enhancement possible for your photo.

Fixing problems

Most problems with the enhanced images are caused either by one or more sliders being pushed up too far, or by the skin or hair areas being wrong.

Use the Brush tools 68 to fix the skin and hair areas.

Other problems can occur if the outlines are not positioned correctly over the face. This can be corrected by moving the control points on the "before" image.

Saving the result

To save the result, select the **Save** command from the File Menu 26 or from the Next button at the top left.

This lets you save the enhanced image as a JPEG image file. The **Save Jpg/Tiff** option allows saving JPEG files with extra options, and also TIFF file saving.

If you would like to save all the settings so that you can reload your image and continuing adjusting the sliders, select the **Save Session** command from the File Menu. This saves the original image, all the point positions, the skin and hair areas and all the sliders values into a proprietary ".pp" file.

2.6   Full Body Enhancement

Portrait Professional is designed to enhance portrait photos.

However, if your photo includes other parts of the body, then you can use the skin enhancement tools on other parts of the skin that can be seen.

To do this, all you need to do is make sure that the Portrait Professional knows which parts of the photo are skin. This is done using the skin area tools, as described in Skin Area 52.

2.7   Plug-in Mode

Using the Portrait Professional Plug-in

Studio Edition Only 9

The Studio edition of Portrait Professional can enter a "plug-in mode". This is intended for use when Portrait Professional has been launched by another application (such as Photoshop) to enhance an image that is being managed by the other application. Portrait Professional then behaves like a plug-in to the other application.

After the plug-in has been successfully installed as outlined in the Plug-in Installation Guide 86, you will be able to use Portrait Professional as a plug-in in any of the supported photo editing applications.

When Portrait Professional is run as a plug-in from another application, the image or layer in the other application will automatically be loaded into Portrait Professional where you can enhance the faces in the usual way. Once you are happy with your results, press the **Return From Plugin** button on the toolbar at the Enhance Face 21 stage. This will close Portrait Professional and return the enhanced image to the original application.

When Portrait Professional is in plug-in mode, the following changes occur:

- The only command in the File menu 26 is **Return From Plugin**.

- The crop tool 70 is not available when in plug-in mode, since the other application will generally expect the image to still be the same size after it has been enhanced by Portrait Professional.

Using Portrait Professional from Photoshop

When the plug-in has been installed, Portrait Professional will appear as a filter in Photoshop. In the Photoshop *Filter* menu, you will find a sub-menu called *Anthropics,* and in that you will find *Portrait Professional*.

The Portrait Professional filter works like other Photoshop filters in that it is applied to the current selection (or the whole area if there is no selection) on the current layer. When you select the filter, the image being filtered will automatically be opened in Portrait Professional.
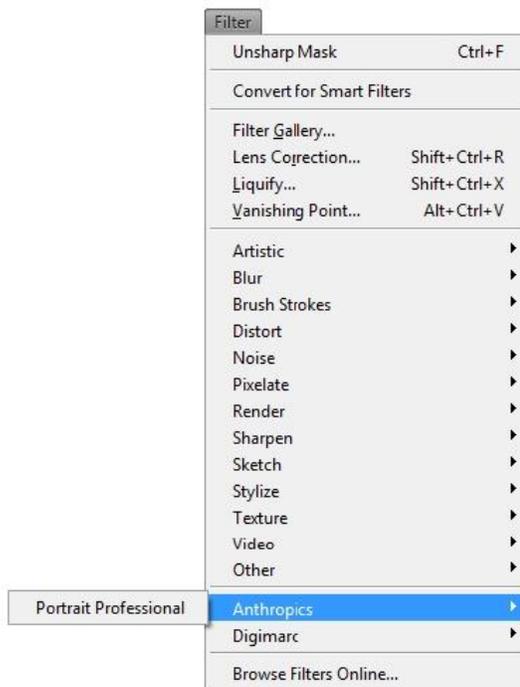
Plug-in Location: Filter > Anthropics > Portrait Professional

2.8   Group Shots

Working with group shots

If there is more than one face in your image, you simply need to go through the enhancement process with each face one by one.

If the automatic face detector found more than one face, you will arrive at the Select Face 13 stage after opening the image. Press the **Select** button over one of the faces to enhance it in the Enhance Face 21 stage.

To enhance another face in the image, return to the Select Face stage by:

- Pressing the **Other Faces** button in the toolbar at the Enhance Image 21 stage, or

- Selecting the menu command "Enhance Another Face In This Photo" from the File Menu 26 (keyboard shortcut **CTRL+E**)

Either of these actions takes you to the Select Face 13 stage, where you can either start enhancing another face in the image, or select a face you have already enhanced to make further adjustments.

You can repeat this process as many times as you need until every face in the image has been enhanced.

Part

III

3   Reference

This section provides information about the different menu commands and controls in Portrait Professional.

The Menu Commands Reference 26 describes each menu command.

The Controls Reference 30 describes each of the controls available when you enhance an image 21.

The Dialogs Reference 53 describes the main dialogs that are used by the application.

3.1   Menu Commands Reference

These are the commands available on the menu bar in Portrait Professional.
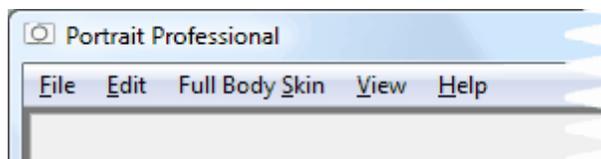
File Menu 26	Commands to open and save files, print, or change settings
Edit Menu 28	Undo & Redo
Full Body Skin Menu 28	This contains a single command, Change Skin Selection Area.
View Menu 28	Commands to control the view of the image
Help Menu 29	Commands to launch help, check for updates, get support, or view about box

3.1.1   File Menu

The File menu contains the following commands:

Open...	Opens a file (see Supported File Types 74).
	If a file is already open with unsaved changes, you will be prompted to save or discard the changes before the new file is opened.
Open Batch...	Studio Edition Only 9
	Opens the Batch 65 dialog.
Save And Open Next	Studio Edition Only 9
	This command only appears when working on an image opened from the Batch 65 dialog.

	Saves the current image, and opens the next one in the batch.
	The folder where the file is saved, and the file format is set from the Batch dialog.
	This command may appear as just "Open Next" if an image is opened from the batch but is then closed using the **File > Close** command.
Save	Saves the current file. The first time this command is used after opening a file, the following rules apply:
	If you opened a JPEG file, the enhanced image will be saved as a JPEG.
	If you opened a TIFF file or any RAW file type (Studio edition only), the enhanced image will be saved as a TIFF.
	If you opened a session file (.pp extension), the session file will be saved.
	From then on, this command will save the same type of file as previously saved.
	If this command is being used for the first time and a new file is being created, a File Save panel will appear to let you select where to save the file.
	This command is only available at the enhance image stage 21.
Save As...	Saves the current file. This is similar to the Save command, except that a File Save panel is always shown to let you select where to save the file.
	This command is only available at the enhance image stage 21.
Save Jpg/Tiff...	Brings up the Save Image Options 54 panel to let you save the enhanced image as a JPG or TIFF image file, and to set save options.
	A File Save dialog will then appear to let you select where to save the file.
	This command is only available at the enhance image stage 21.
Save Session...	Saves the current session so that it can be opened again in Portrait Professional.
	Portrait Professional sessions files are saved in a proprietary format that cannot be loaded into any other applications. The file extension is ".pp". They include the image along with all the point positions, slider settings and masks.
	This command is only available at the enhance image stage 21.
Close	Closes the current session. If there are any unsaved changes, you will be prompted to save or discard these.
	The Close command returns you to the Welcome screen 12.
Enhance Another Face In This Photo	Goes to the Select Face 13 stage so that another face in the same image can be enhanced.
	The same command is available on the **Other Faces** button in the toolbar at the Enhance Face 21 stage.
Settings...	Brings up the Settings 58 dialog.

Print...	Brings up the Print dialog that lets you print out the enhanced image.
Exit	Closes the application. If there are any unsaved changes, you will be prompted to save or discard these.

If the application is in plug-in mode 22, then the only command in the File menu is **Return From Plugin**, which returns the enhanced image to the calling application and closes Portrait Professional.

3.1.2   Edit Menu

The Edit menu contains the following commands:

Undo	Provides undo for changes to slider values and changes made with the brush tools.
	This means it is safe to experiment with different saved settings, or try moving any sliders, since you can always go back to the result you had earlier if you don't like the changes.
	This command is only available at the enhance image stage 21.
Redo	Lets you redo an operation that has been undone with the *Undo* command.

3.1.3   Full Body Skin

The Full Body Skin menu contains the following command:

Change Skin Selection Area	This command brings up the Skin Selection 64 panel for changing the skin area.
	This command is only available at the enhance image stage 21.

3.1.4   View Menu

The View menu contains the following commands:

Full Screen	Makes the application fill the entire screen, to maximize the working area.
	To restore the application to it's windowed state, select this command again.
Faster Rendering	Increases the speed at which the enhanced image is calculated.

|	This is done by reducing the number of working pixels in the enhanced image. This option is useful if the sliders are particularly sluggish on your machine. If you find that the enhanced image looks too soft, you should turn this option off. *Note:* this option only affects how the enhanced image appears within the application. It will make no difference to the quality of the image saved when you use the **File > Save Jpg/Tiff** menu command.

3.1.5   Help Menu

The Help menu contains the following commands:

Contents	Launches the online help, showing the table of contents.
Quick Start Guide	Launches the online help showing the Quick Start Guide 7.
Keyboard Shortcuts	Launches the online help showing the Keyboard Shortcuts 75.
Re-Enable Pop-up Help	Turns on all pop-up help messages that have been disabled. This command only appears if you have disabled any pop-up help messages.
Check For Updates...	Launches the default web browser to show whether you have the latest version of Portrait Professional. If updates are available, links will be provided for you to download them.
Support...	Launches the default web browser to show the Portrait Professional support pages. You can use this to find answers to common questions, or to contact the Portrait Professional support team.
Forum...	Launches the default web browser to show the Portrait Professional user forum. This is where you can join the Portrait Professional community in discussions about the product and photography in general.
About Portrait Professional	Brings up the About Box, which shows the version of Portrait Professional that you have.

3.2 Controls Panel Reference

This section describes the main controls available when you are enhancing an image.

Enhance Image Controls Overview
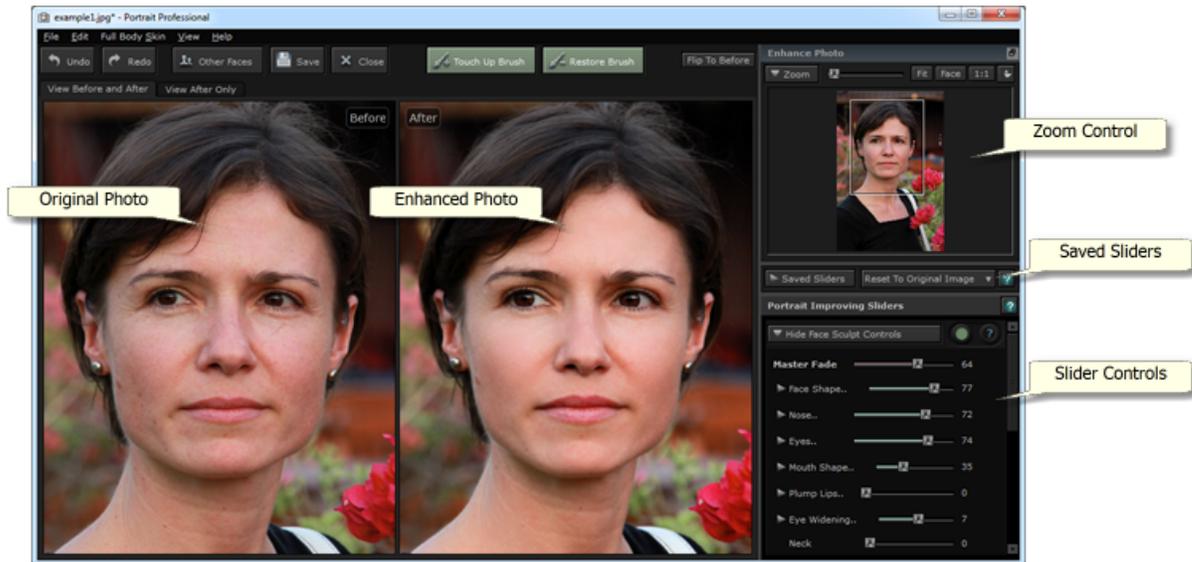
Zoom Control 31 - Lets you select the area of the image that is shown

Saved Sliders 33 - Lets you set groups of sliders to saved values

Slider Controls 34 - The main slider controls that give you total control over the way the image is enhanced.

These are grouped into the following sections:

- Face Sculpt Controls 36 - Let you control how the shape of the face is altered

- Skin Controls 38 - Let you control how the skin is enhanced

- Eye Controls 42 - Let you control how the eyes are enhanced

- Mouth & Nose Controls 45 - Let you control how the mouth, lips and nose are enhanced

- Hair Controls 48 - Let you control how the hair is enhanced

- Skin Lighting Controls 47 - Let you adjust the lighting on the skin

- Picture Controls 50 - Controls that affect the whole image, such as brightness/contrast, and cropping

Original Photo - Shows the original ("Before") image

Enhanced Photo - Shows the enhanced ("After") image

Viewing the controls

The main sections in the controls panel (on the right in the screenshot above) can be opened or closed by clicking on the buttons in the header of each section. These buttons have a small triangle next to them which points down if the section is open, or to the right if the section is closed.

Resizing the controls

The control panel can be made wider or narrower by dragging the right edge of the control panel.

The main sections in the control panel can be resized by dragging the space between them.

Docking & undocking the controls

The controls panel can be undocked (made into a separate window) by double clicking on the header at the top.

When it is undocked it can be freely moved around the screen.

It can be docked by double clicking on the header again, or by dragging it to the left or right edge of the main application window.

When dragging the controls panel to dock it, please note that it is not sufficient to just move the controls window to the left or right edge of the main window, it is the cursor that needs to be moved near the edge.

Viewing the enhanced image

The default view when the application is first installed is for the original and enhanced images to be shown side by side, as shown in the screenshot above.

The two tabs above the images control the layout of the working view.

- Click on the **View After Only** tab to have only the enhanced image shown.

- Click on the **View Before And After** tab to return to the side by side layout.

Flipping between the enhanced and original image

Whichever layout you have, you can press the Enter key at any time to switch the enhanced image view to show the original image. The original image is only shown while you hold down the enter key.

This lets you flip between the enhanced and original image which is a great way to see the changes.

Alternatively, you can click and hold the mouse button down on the button above the images that says **Hold Button or [Enter] To Flip To Original**.

3.2.1 Zoom Control

The Zoom Control is part of the control panel in the enhance photo stage.

It lets you see what part of the whole image is visible in the working view. It also provides controls to let you zoom in and out, or pan the current view.
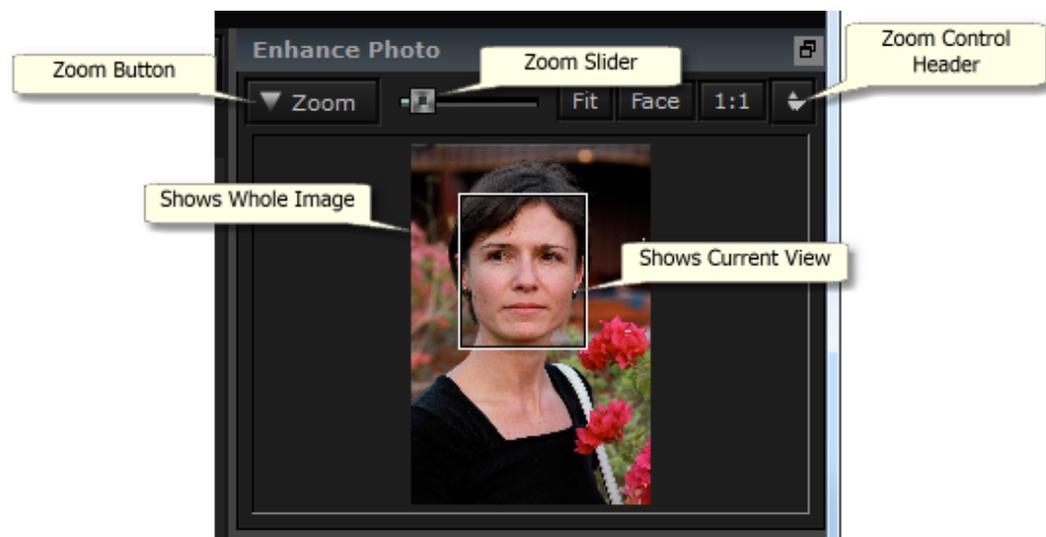
The screenshot above shows the Zoom Control.

The Zoom Control Header contains the following controls:

Zoom Button	Lets you collapse the Zoom control so that just the Zoom Control Header is shown. Click again to expand the Zoom control.
Zoom Slider	Lets you zoom in (slide to the right) or out (slide to the left).
"Fit" Button	Zooms the view so that the whole image is visible.
"Face" Button	Zooms the view to the face.
"1:1" Button	Sets the zoom scale so that a pixel in the original image is one screen pixel.
Zoom In/Out Button	Shows a drop-down menu with various zoom scales. The current zoom scale is checked. The ratios are image pixels to screen pixels, as shown by these examples: • 4:1 means 4 screen pixels are filled by 1 image pixel (the image is zoomed in by a factor of 4). • 1:4 means 1 screen pixel is covered by 4 image pixels (so the image is zoomed out by a factor of 4).

The rectangle in the Zoom Control can be dragged to pan the view.

Clicking outside the rectangle will center the view on that point.

The view can also be panned by using the .

The whole control panel (including the Zoom Control) can be made wider by dragging the right edge of the control panel.

The Zoom Control can be made taller or shorter by dragging the space between the Zoom Control and the Saved Sliders Control.
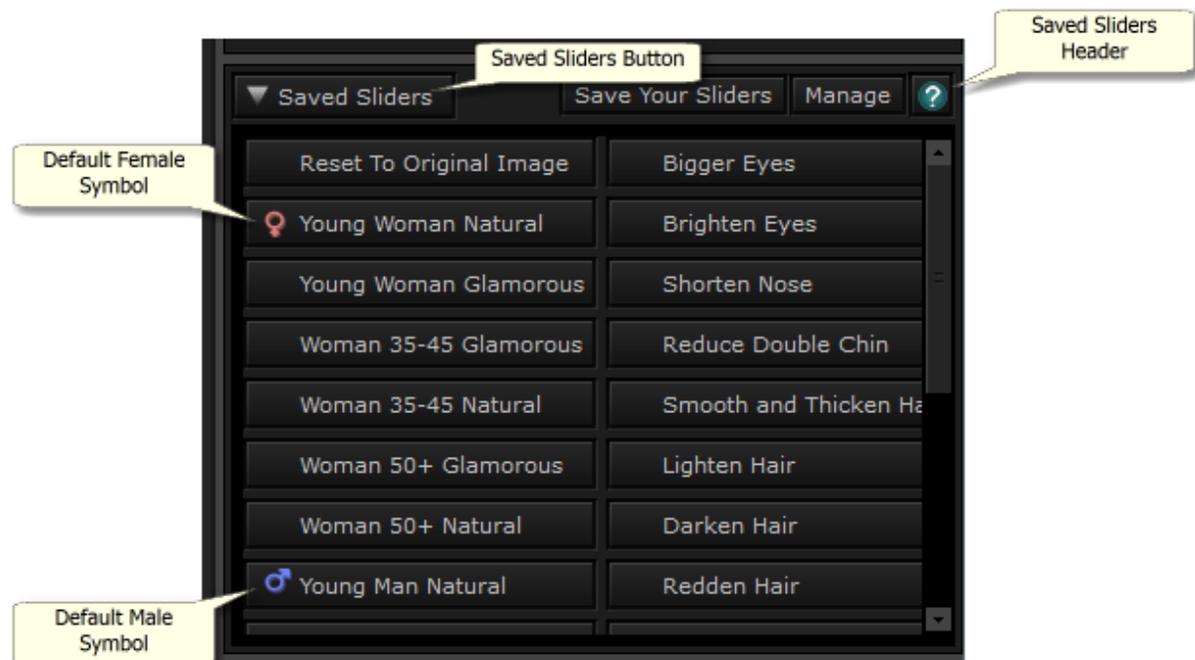
Keyboard Shortcuts

+	Zoom in.
-	Zoom out.

3.2.2   Saved Sliders

Saved Sliders let you quickly set the values of multiple sliders.

Press on one of the buttons in the Saved Sliders control to set the sliders to give the effect described by it's name.

When Portrait Professional is installed, it comes with a number of Saved Sliders ready for you to use.

One of the Saved Sliders setting is used to set the initial slider values when a face is enhanced. The setting used can be different depending on whether the face is female or male, and is indicated using the female or male symbol as shown in the screenshot above. To change which Saved Sliders setting is the default for new faces, use the Manage Saved Sliders 64 dialog.

The Saved Sliders Header contains the following controls:

Saved Sliders Button	Lets you collapse the Saved Sliders control so that just the Saved Sliders Header is shown. When it is collapsed, the controls in the Saved Sliders Header change to those described below. Click again to expand the Saved Sliders control.
"Save Sliders" Button	Brings up the Save Sliders 62 dialog. This lets you save the current slider values as a new Saved Sliders setting.
"Manage" Button	Brings up the Manage Saved Sliders 64 dialog. This lets you rename, re-order or delete Saved Sliders. It also lets you change the default female and male Saved Sliders.
"Help" Button	Brings up this help page.

Note: each Saved Sliders setting does not necessarily affect all the sliders. This means that if you select one Saved Sliders setting, then select another one, and then select the first one again you will not necessarily restore all sliders to the same values you had after you selected the first setting originally. This is because any sliders that are affected by the second setting but not the first will not be set back.

The collapsed Saved Sliders control

When the Saved Sliders control is collapsed by pressing the Saved Sliders Button, it looks like this:

The Save Sliders Button and the Manage Button are replaced by a Select Saved Sliders Button. This lets you select Saved Sliders settings even though the control is collapsed.

When you press on the Select Saved Sliders Button, a drop down menu containing all the Saved Sliders appears. Click on one of the Saved Sliders in the menu to set the sliders to the values in that Saved Sliders setting.

Resizing the Saved Sliders control

The whole control panel (including the Saved Sliders control) can be made wider by dragging the right edge of the control panel.

The Saved Sliders control can be made taller or shorter by dragging the space between the Saved Sliders control and the main Sliders Control.

3.2.3   Slider Controls

Sliders are the main way of controlling how your image is enhanced.

Sliders have no effect if they are set to 0, and an increasing effect as they are moved to the right (and left if they have 0 in the center).

You can double click on a slider to reset its value to 0.

Slider Sections

The sliders are organized into a number of sections.

Face Sculpt Controls 36	Subtly reshape the face to beautify facial features.
Skin Smoothing Controls 38	Improve the appearance of the skin. Also provides tools to let you refine the areas that Portrait Professional treats as skin.
Eye Controls 42	Improve the appearance of the eyes. Also provides an option to enable red-eye removal.
Mouth & Nose Controls 45	Improve the appearance of the mouth and nose.
Skin Coloring Controls 46	Alter the color of the skin.
Skin Lighting Controls 47	Enhance the lighting on the skin.
Hair Controls 48	Improve the appearance of the hair. Also provides tools to let you refine the areas that Portrait Professional treats as hair.
Picture Controls 50	Control various aspects of the whole image, such as brightness and contrast. Also provides a tool that lets you crop the image.

To reduce clutter on the screen, each section can be opened or closed by clicking on it's title button. The arrow next to the title points right when the section is closed, and down when the section is open.

Each section can also be turned on or off by pressing the on/off button to the right of the section's title button. When a section is turned off, it has no effect on the enhanced image. This can be useful to see what effect a section is having.

Slider Organization

Sliders are organized in a hierarchy.

Most sections have a **Master Fade** slider that controls all the main sliders in that section. This lets you quickly see how the controls in that section affect your image.

Underneath each master slider is a hierarchy of sliders that give you fine control over all aspects of the enhancement.

If a slider has more sub-sliders underneath it, then the slider's label will be a button with a triangle to the left of the label. Press this button to open the sub-sliders.

When you move a slider that has sub-sliders underneath it, the sub-sliders will move too.

When you move a sub-slider, you will also see the parent slider moves too, but to a lesser extent. This is

because the parent sliders always show a weighted average of the sliders underneath. This gives a rough indication of the values of the sub-sliders even when the sub-sliders are closed.

Each slider controls the effect described by it's label.

For most sliders, you increase the effect by moving the slider to the right and decrease the effect by moving the slider to the left. The exception is those sliders that allow negative values and have 0 in the center. For these sliders, move the slider away from the center to increase the effect or back towards the center to decrease the effect.

As you drag a slider, the enhanced image is updated in real-time so you can see what effect it has.

If a slider is at 0, then the effect it controls will make no change to the image.

Sliders with 0 in the center will "snap" to 0, which means they go to 0 if they are moved near 0. If you want to get a value near to 0 but are finding the slider is snapping to 0, you can hold the CTRL key to prevent the slider from snapping to 0.

Instead of dragging a slider, you can click on its number value and use the up/down control to change the slider position, or type a numeric value, or use the up/down cursor keys.

To find out what an individual slider does, hover over it with the mouse.

3.2.4 Face Sculpt Controls

Portrait Professional is the only photo editing software that gives you the ability to subtly reshape and beautify facial features, simply by moving sliders.

Some people regard this unique ability of Portrait Professional to actually change the shape of the face as going too far when enhancing someone's picture. For those people, the shape sliders can of course be left at 0 and Portrait Professional will not change the shape.

However, before dismissing this effect as "cheating", we urge you to try it - you will be amazed that sometimes a subtle change to the shape can lead to a dramatic improvement to the subject. One good trick is not to do too much - just enough to make the subject look a bit thinner or as if they have been photographed on a really good day!

Sliders

Master Fade	This slider is connected to the other sliders in this section that perform general enhancement to the shape of the face and facial features. You will see the other sliders move as this one is moved. The sliders that are not connected to the master fade slider are those that control effects that are likely to work well only on specific faces, such as the lip plumping and eye widening sliders.
Face Shape	Enhances the shape of the face. Pressing the **Face Shape** button opens the following sub-sliders:
	Forehead — Enhances the shape of the upper head.
	Jaw — Enhances the shape of the jaw.

Nose	Enhances the shape of the nose. Pressing the **Nose** button opens the following sub-sliders:
	Shorten Nose — Shortens (or lengthens) the nose by changing the size of the head.
	Shorten Philtrum — Shortens (or lengthens) the philtrum, which is the gap between the bottom of the nose and the top of the upper lip, by changing the length of the nose.
	Slim Tip — Shrinks (or enlarges) the tip of the nose.
	Slim Nose — Narrows (or widens) the whole nose.
Eyes	Enhances the shape and position of both eyebrows and eyes. Pressing the **Eyes button** opens the following sub-sliders:
	Left Eye — Enhances the shape of the left eye only - useful for evening out eye shape and size.
	Right Eye — Enhances the shape of the right eye only.
	Eyebrow Shape — Enhances the shape of the eyebrows. Pressing the **Eyebrow Shape** button opens two sub-sliders that let you control the left and right eyebrow shapes independently.
	Cross Eyed — Moves the eyes further apart (or closer together).
Mouth Shape	Enhances the overall shape of the mouth. Pressing the **Mouth Shape** button opens the following sub-sliders:
	Smile — Changes the mouth shape to make it look like a smile.
	Upper Lip — Enhances the shape of the upper lip only.
	Lower Lip — Enhances the shape of the lower lip only.
	Expression — Changes the mouth expression.
	Blur Lip Line — Blurs the line between the teeth and the lips to prevent a jagged look that can occur when face sculpting. This slider does not appear if the mouth is closed.
Plump Lips	Makes the lips fatter. Pressing the **Plump Lips** button opens two sub-sliders that

	let you control the upper and lower lips independently.
Eye Widening	Widens (or narrows) the subject's eyes. Pressing the **Eye Widening** button opens two sub-sliders that let you widen the left and right eyes independently.
Neck	Lengthens the neck, which can make the subject look more attractive.

Restore Glasses' Shape

If the subject is wearing glasses, then there may be visible distortions to the shape of the glasses due to the shape changes that Portrait Professional is making around the eyes. To fix this, check the **Restore Glasses' Shape** box, which will reduce any shape changes around the eyes so that the glasses are not distorted.

Example

BEFORE   **AFTER**

3.2.5 Skin Smoothing Controls

The skin smoothing controls let you selectively remove or reduce wrinkles, spots and other skin defects while retaining the original skin texture. And all this can be done just by moving sliders.

You can also reduce fine shadows and shine.

Portrait Professional automatically determines the skin area, but you will get better results if you check and fix the skin area 52.

Sliders

Master Fade	This slider is connected to the other sliders in this section that perform general enhancements to the skin. You will see the other sliders move as this one is

	moved.
Imperfections	Subtly removes redness and reduces small skin blotchiness within the skin area. **Before** **After**
Thin Wrinkles	De-emphasizes wrinkles by making them thinner and lighter within the skin area. **Before** **After**
Fine Shadows	Fades away dark specks and fine wrinkles within the skin area. **Before** **After**
Remove Pores	Removes pores and smooths within the skin area, giving a smooth airbrush effect.
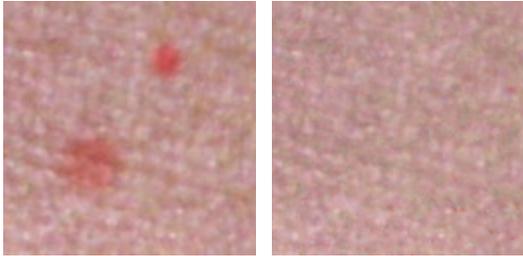
	Before	After

Shine	Softens shiny areas within the skin area, by making them pinker. **Before** **After**
Around Eyes	Reduces bags under the eyes, and reduces "crows feet", the wrinkles that appear next to the outer corners of the eyes. Pressing the **Around Eyes** button opens the following sub-sliders that let you control these enhancements independently:

Lighten Eye Bags	Reduces the appearance of bags under the eyes by lightening the skin color in the area where eyebags appear. Press the **Lighten Eye Bags** button to open two sub-sliders that let you control the left & right eyes independently.
Smooth Eye Bags	Reduces the appearance of bags under the eyes by lightening the skin color in the area where eyebags appear. Press the **Smooth Eye Bags** button to open two sub-sliders that let you control the left & right eyes independently.
Smooth Crows Feet	Smooths the areas to the left of the left eye and to the right of the right eye where crows feet appear. Press the **Smooth Crows Feet** button to open two sub-sliders that let you control the left & right eyes independently.

Skin Smoothing	Removes larger imperfections from the skin while keeping fine detail. **Before** **After**

Shading Bleed	Adjust this slider to get a good compromise between removing blemishes and avoiding dark areas bleeding into light areas.
Texture	This controls how much skin texture to apply in areas where skin texture is being corrected. This texture goes into touch-up brush strokes and areas where the sliders have had an effect. You will need to zoom in the picture to see the effect of changes to the skin texture. Pressing the **Texture** button opens the following sub-sliders:
	Brightness Finer control over skin texture brightness.
	Saturation Finer control over skin texture saturation. The greater the saturation, the more intense the color.
	Size Makes the synthetic skin texture pattern larger or smaller.

Skin texture type.

There are a selection of skin textures to choose from. You will need to zoom in on a skin area to see the effect of changing the skin texture.

Removing Spots

Portrait Professional automatically removes spots by default.

You can adjust the degree to which Portrait Professional removes spots using the **Spot Removal** drop-down menu at the top of the Skin Controls.

If you find that Portrait Professional has not removed a spot, you can manually touch-up an area using the **Touch-Up** brush.

If Portrait Professional has removed a spot that you want to keep, you can manually restore it using the **Restore** brush.

More information about using brush tools 68 .

Example

The Before and After pictures below show an example of how wrinkles were removed automatically by Portrait Professional:

3.2.6 Eye Controls

Portrait Professional can automatically brighten, whiten and sharpen the eyes. The Eye controls allow you to adjust exactly how much effect you get. You can also change the color of the eyes.

Sliders

Master Fade	This slider is connected to some of the other sliders in this section that perform general enhancements to the eyes. You will see the other sliders move as this one is moved.
Whiten Eyes	Whitens the white part of the eyes. The area affected is controlled by the Brightening Area slider. Whitening takes any color out of the whites of the eyes leaving them a shade of gray when the slider is at the top. Pressing the **Whiten Eyes** button opens two sub-sliders that let you whiten the left and right eyes independently.
Brighten Eyes	Brightens the white part of the eyes. Brightening increases the brightness while maintaining the color. Pressing the **Brighten Eyes** button opens two sub-sliders that let you brighten the left and right eyes independently.
Brightening Area	Changes the area of the eye that will be whitened or brightened by the Eye Whiten or Eye Brighten sliders. Pressing the **Brightening Area** button opens two sub-sliders that let you change the brightening area for the left and right eyes independently.
Sharpen Eyes	Sharpens the subject's eyes. Pressing the **Sharpen Eyes** button opens the following sub-sliders that let

	you control the amount of sharpening applied to different parts of the eyes.
	Upper L Lash — Sharpens the upper left eye lashes.
	Lower L Lash — Sharpens the lower left eye lashes.
	Left Eye — Sharpens the left eye.
	Left Lash Area — Changes the size of the area that the left eye sharpening influences.
	Upper R Lash — Sharpens the upper right eye lashes.
	Lower R Lash — Sharpens the lower right eye lashes.
	Right Eye — Sharpens the right eye.
	Right Lash Area — Changes the size of the area that the right eye sharpening influences.
Sharpen Eyebrows	Sharpens the subject's eyebrows. Pressing the **Sharpen Eyebrows** button opens two sub-sliders that let you sharpen the left and right eyebrows independently.
Change Eye Color	Press the **Change Eye Color** button to open the sub-sliders that let you change the color if the irises. **Amount of Change** — If this slider is 0, the color of the eyes will be unchanged (the **Color** and **Intensity** sliders will be ignored). Set this to 100 to set the eye color selected by the **Color** and **Intensity** sliders. Lower values will blend between the selected color and the original eye color. If this slider is at 0, it is automatically set to 100 whenever the **Color** or **Intensity** sliders are moved. Press the **Amount of Change** button to open two sub-sliders that let you set the amount of change for the left and right eyes independently. **Color** — Sets the color of the eyes (provided the **Amount of Change** slider is not 0). Press the **Color** button to open two

		sub-sliders that let you set the color for the left and right eyes independently.
	Intensity	Sets the intensity of the eye color.
		Press the **Intensity** button to open two sub-sliders that let you set the intensity for the left and right eyes independently.
Brighten Iris	Brightens or darkens the iris (the colored part of the eye).	
	Pressing the **Brighten Iris** button opens two sub-sliders that let you brighten or darken the left and right irises independently.	
Darken Pupil	Darkens the pupil (the black part in the middle of the eye) in the eyes.	
	Pressing the **Darken Pupil** button opens two sub-sliders that let you darken the left and right pupils independently.	
Remove Pupil Reflection	This slider blackens the pupil area to remove reflections. This can be used with the **Add Reflection** drop down list to add new eye reflections.	
	Pressing the **Remove Pupil Reflection** button opens two sub-sliders that let you remove catch-light reflections from the left and right pupils independently.	
Nudge Reflections	If you have added a reflection to the eye using the **Add Reflection** drop down list, you can press the **Nudge Reflections** button to open up sliders that let you move the position of the reflections in the eyes.	
	If you have not added a reflection from the drop down list, these sliders will have no effect.	
	Left Eye Horiz.	Moves the reflection in the left eye horizontally (left & right).
	Left Eye Vert.	Moves the reflection in the left eye vertically (up & down).
	Right Eye Horiz.	Moves the reflection in the right eye horizontally.
	Right Eye Vert.	Moves the reflection in the right eye vertically.

Red Eye Removal

If your photo has "red-eye" (caused by a flash illuminating the insides of your subject's eyes), this can be automatically removed by checking the **Red Eye Removal** box at the top of the Eye controls.

You can choose from a selection of reflection images (catch-lights) to be added to the eyes.

Example

The Before and After pictures below show an example of how the model's eyes were whitened and sharpened automatically by Portrait Professional.

3.2.7 Mouth & Nose Controls

Portrait Professional automatically whitens the teeth and enhances the color of the lips. The Mouth & Nose controls allow you to adjust these effects to get exactly the look you want.

Sliders

Master Fade	This slider is connected to some of the other sliders in this section that perform general enhancements to the mouth and nose areas. You will see the other sliders move as this one is moved.
Whiten Teeth	Removes any color from the teeth. The area affected is controlled by the **Whiten Area** slider. This control is not shown if the mouth is closed.
Brighten Teeth	Brightens the teeth. The area affected is controlled by the **Whiten Area** slider. This control is not shown if the mouth is closed.
Whiten Area	Changes the teeth area affected by the **Whiten** & **Brighten Teeth** sliders. This control is not shown if the mouth is closed.
Lip Saturation	Makes the lips more colorful.
Lip Darken	Move this slider to the right to darken the lips, or to the left to make them lighter.
Lip Contrast	Increases the contrast within the lip area, giving the lips more impact.
Lip Hue	Changes the color of the lips.
Moisten Lips	Adds some shine to the lips.
Sharpen Mouth	Sharpens the outline and details of the mouth. Press the **Sharpen Mouth** button to

	open the following sub-sliders that let you control the amount of sharpening applied to the different parts of the mouth independently.
	Top Lip Sharpens the top lip only.
	Teeth Sharpens the teeth only.
	Bottom Lip Sharpens the bottom lip only.
Nose Contrast	Increases the contrast within the nose to draw attention to it.

Example

3.2.8   Skin Coloring Controls

The skin coloring controls let you selectively make changes to the color of the skin.

Portrait Professional automatically determines the skin area, but you will get better results if you check and fix the skin area 52 .

Sliders

Auto White Balance	Automatically adjusts the color of the skin to remove any color cast. If the skin areas already have a good white balance, this slider will have little or no effect.
	For manual control over the white balance of the skin areas, use the **Temperature** and **Tint** sliders in this section.
Auto Exposure	Automatically adjusts the exposure of the skin. If the skin areas already have good exposure, this slider will have little or no effect.
	For manual control over the exposure of the skin areas, use the **Exposure** slider in this section.
Temperature	Adjusts the color of the skin to remove any temperature (red-blue) color cast.
Tint	Adjusts the color of the skin to remove any tint (green-purple) color cast.
Exposure	Adjusts the exposure of the skin.

Cheek Coloring	Adds color to the cheeks. Pressing the **Cheek Coloring** button opens the following sub-sliders:

	Cheeks Saturate	This is directly connected to the **Cheek Coloring** parent slider, so provides the same control. Pressing the **Cheeks Saturate** button opens two sub-sliders that let you add color to the left and right cheeks independently.
	Cheeks Hue	Changes the color temperature of the cheeks. Pressing the Cheeks Hue button opens two sub-sliders that let you change the color temperature of the left and right cheeks independently.

Balance Hue	Gives a more even coloring within the skin area. If the skin areas already have even coloring, this slider will have little or no effect.

Before   **After**

Tan	Gives the skin area a tanned look. Pressing the **Tan** button opens the following sub-sliders:

	Saturate	Gives the skin area a richer color.
	Darken	Subtly darkens the skin area.

3.2.9   Skin Lighting Controls

Portrait Professional lets you enhance the lighting on the subject's face via simple controls. You can adjust highlights, adjust shadows and adjust contrast.

Sliders

Cheekbo nes	Gives more definition to the cheekbones. Pressing the **Cheekbones** button opens two sub-sliders that let you change the left and right cheeks independently.
Shadows	Reduces the dark shadow areas within the skin selection.
Relight	Corrects defective lighting on the face only.

Contrast	Adjust the overall contrast within the skin selection.
Highlights	Darkens any bright area of skin within the skin selection.

Note: these lighting sliders only affect those parts of the picture that are in the skin area 52. Press the View/ Edit Skin Area 52 button to change the skin area.

Example

3.2.10 Hair Controls

Portrait Professional lets you enhance the hair of the subject by moving sliders. Please note that before doing this, it is important to have the hair area set reasonably accurately – see Hair Area 52.

Sliders

Hair Recolor Amount	Controls how much hair recoloring to apply. The color is set by selecting one of the hair patches in the **Hair Recolor** drop-down list. This slider will be automatically set to 100 if it is at 0 when a hair color is selected in the **Hair Recolor** drop-down list.
Shine	Makes the hair more or less shiny.
Lighten	Makes the hair lighter or darker.
Redden	Alters the coloring of the hair. Higher values are redder, while negative values tend to make the hair grayer.
Vibrance	Increasing the vibrance will make the color of the hair more intense.

Hair Tidying Mode

Further controls are located in Hair Tidying Mode. Click on **Go to Hair Tidying Mode** to access these sliders.

Fill Hair Shadows	Fills out shadows within the hair caused by hair clumping. **Before** **After** Press the **Fill Hair Shadows** button to open the following sub-sliders to give finer control over the enhancement: **Shadow Brightness** — Controls how bright to make the shadows brightened by the "Fill Hair Shadows" slider. **Shadow Texture** — Controls how much texture to reveal in the shadows brightened by the "Fill Hair Shadows" slider.
Smooth Hair	Smooths out stray hairs. **Before** **After** Press the **Smooth Hair** button to open the following sub-slider that gives further control over the way the hair is smoothed: **Smoothing Softness** — Alters the degree to which the Smooth Hair slider makes the hair appear soft.

Leave Hair Tidying Mode by pressing the **OK** button.

3.2.11 Picture Controls

These controls affect the whole image and allow you to adjust the overall look of the picture, controlling things like the contrast and color temperature.

You can also crop the image using the Crop tool 70.

Sliders

Auto White Balance	Automatically adjusts the color of the whole image to remove any color cast, using the skin as a reference color. If the skin area is already a natural skin color, this slider will have little or no effect.
Auto Exposure	Automatically adjusts the exposure of the image using the skin as a reference. If the skin area already has a good exposure, this slider will have little or no effect.
Temperature	Adjusts the color of the whole image to remove any temperature (red-blue) color cast.
Tint	Adjusts the color of the whole image to remove any tint (green-purple) color cast.
Exposure	Adjusts the overall exposure (brightness) of the whole image. Pressing the **Exposure** button opens the following sub-slider that provides an alternative exposure control. **Color Preserving Exposure** — Adjusts the overall exposure (brightness) of the whole image in a way that prevents the color changes that can occur when highlights become blown.
Brightness	Adjusts the brightness of the whole image. This control has most effect on the mid-tones of the image.
Smart Contrast	Increases or decreases the contrast of the whole image in such a way so as to bring out the detail but leave the average brightness and color of the image unchanged. Pressing the **Smart Contrast** button opens the following sub-sliders that provide alternative contrast controls: **Contrast** — Adjusts the overall contrast of the whole image using the standard simple technique. **Color Preserving Contrast** — Adjusts the overall contrast of the whole image in a way that prevents color changes that the standard contrast slider can introduce.
Vibrance	Adjusts the overall vibrance of the whole image. Increasing the vibrance will make the colors in the picture more intense. Decreasing the vibrance will make the colors less intense (more gray).

	Pressing the **Vibrance** button opens the following sub-slider that provides a similar effect:
	Saturation — Adjusts the overall color saturation (color intensity) of the whole image. Vibrance and Saturation are similar effects, the difference is that vibrance has less effect than saturation on colors that are less intense. Neither slider affects areas that are black, white or gray.
Tone Curve	Tone curves are used to change the brightness of an image in a way that allows different amounts of change in areas that have different brightnesses. The Tone Curve slider is connected to several of the sub-sliders that combine to produce an overall brightening effect when the slider is moved to the right, or a darkening effect if the slider is moved to the left.
	Pressing the **Tone Curve** button opens the following sub-sliders:
	Fix Flash — Retrieve details in blown out highlights.
	Highlights — Increases or decreases the brightness of highlights.
	Lights — Increases or decreases the brightness of light areas.
	Darks — Increases or decreases the brightness of dark areas.
	Shadows — Increases or decreases the brightness of shadows.
	Blacks — Accentuates black areas.
	Fill Shadows — Brightens just the darker areas of the image, to bring out detail in the shadow areas.

Example

3.2.12 Skin Area Tools

Portrait Professional automatically determines which areas of the picture are skin. This is the area that will be affected by the skin and skin lighting sliders. For some pictures, Portrait Professional may not get the skin area exactly right, so you should always check the skin area and fix it if necessary.

To check and fix the skin area, click the **View/Edit Skin Area** button which is at the top of each of the sections that contain sliders that enhance the skin area. These sections are: Skin Smoothing 38, Skin Coloring 46 and Skin Lighting 47.

This will switch to the skin area selection tools. The skin area will be shown by default as a translucent blue overlay over the enhanced image. If this color does not make it easy to see the skin area in your picture, you can choose another color from the **Color** drop down list.

If the skin area is wrong, manually adjust it using the Skin Area Brushes 69.

You can also get Portrait Professional to recalculate the skin area by clicking on the **Recalculate Skin Area** button. This will bring up the Skin Area 64 dialog.

Press the **OK** button to return to the slider controls.

3.2.13 Hair Area Tools

Portrait Professional automatically finds the area in the image that is hair. This is the area that will be affected by the hair sliders. It is important to get this area fairly accurate otherwise the hair sliders will not work as well as they can.

To check and fix the hair area:

Press the **Show Hair Controls** button to open the Hair Controls 48 section.

Click on the **View/Edit Hair Area** button at the top of the Hair Controls. This will switch to the hair area selection tools. The hair area will be shown as a translucent pink overlay over the enhanced image. If this color does not make it easy to see the hair area in your picture, you can choose another color from the drop down list.

If the hair area is wrong, manually adjust it using the <u>Hair Area Brushes</u> 69.

Press the **OK** button to return to the hair controls.

3.3   Dialogs Reference

This section describes the dialogs in Portrait Professional.

<u>Save Image Options</u> 54	Options when saving image as JPEG or TIFF.
<u>General Settings</u> 56	Settings that control various parts of Portrait Professional
<u>Color Settings</u> 58	Color Profile settings (Studio edition only)
<u>Language Settings</u> 60	User interface language setting (Multi-lingual versions only).
<u>Save Sliders</u> 62	Used to save the current slider values.
<u>Manage Saved Sliders</u> 64	Manage the Saved Sliders settings (rename, re-order, or delete).
<u>Skin Selection</u> 64	Lets you configure and recalculate the skin area.

3.3.1 Select Gender

This dialog appears when the gender of a face has not been set.

Press the **Female** or **Male** buttons to set the gender (or **Girl** or **Boy** if the face is of a young child). This will dismiss the panel and let Portrait Professional continue to the next step.

Press the Cancel button if you do not want to set the gender, and this will return to the previous step.

If the dialog was shown automatically when a single face was detected, it will also have the **Discard Outlines** button, in case the face was not detected properly.

This dialog can appear at the following times:

- After loading an image 12 , when one face has been found.

- When pressing the **Select** button on a face at the Select Face 13 stage, if the gender for that face is not already set.

3.3.2 Save Image Options

When you save an image using the **File > Save Jpg/Tiff** menu command, the Save Image Options dialog will appear.
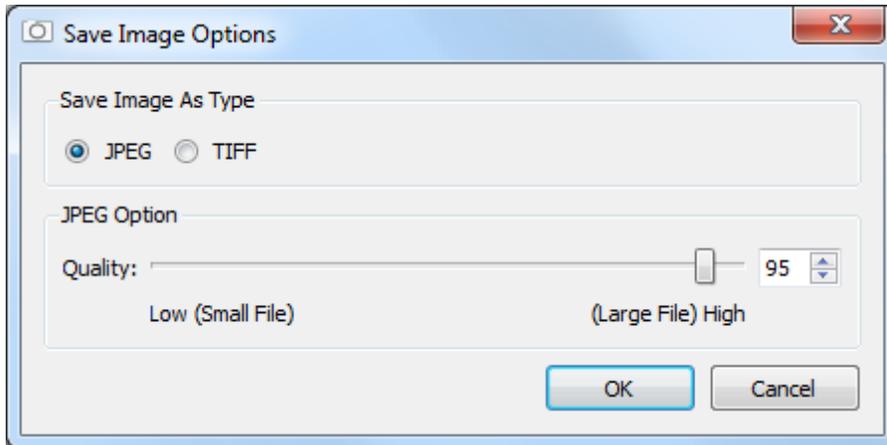
This lets you select whether you want to save the image as a JPEG or TIFF file.

JPEG Format

If you select JPEG, you can control the quality of the image saved. The advantage of choosing a lower quality is that the file size can be much smaller. JPEG is usually the best option if you don't plan to do any more editing of the image after you have saved it.

TIFF Format

Saving an image as a TIFF will usually result in a larger file than saving it as a JPEG. However, TIFF stores the exact image, there is never any loss in quality. This is the best option if you plan to open the image to edit further in another image editor.

TIFF images can be stored either uncompressed or losslessly compressed. The recommended setting is for compressed, because the only reason for not selecting this would be if you wanted to open the TIFF file in another application that did not support compressed TIFFs (although it is unlikely any modern software would not support this format).

Studio Edition Only 9 TIFFs can store either 8 or 16 bits per color sample. If you are working with a 16 bps image, then you will get the option to save a TIFF with either 8 or 16 bps. You will be working with a 16 bps image if either your Color Settings 58 are set to **Always Use 16 bps**, or you loaded an image that contains 16 bps and your Color Settings are set to **Use Same Bit Depth As Input Picture**.

3.3.3   Settings

To bring up this dialog, select **File > Settings** menu command.

General 56	General Settings
Color 58	Color Settings
Language 60	Language Settings
Plugin 60	Lets you install the Photoshop filter plug-in that lets Portrait Professional be used as a filter from Photoshop.

3.3.3.1 General Settings

To bring up this dialog, select **File > Settings** menu command.
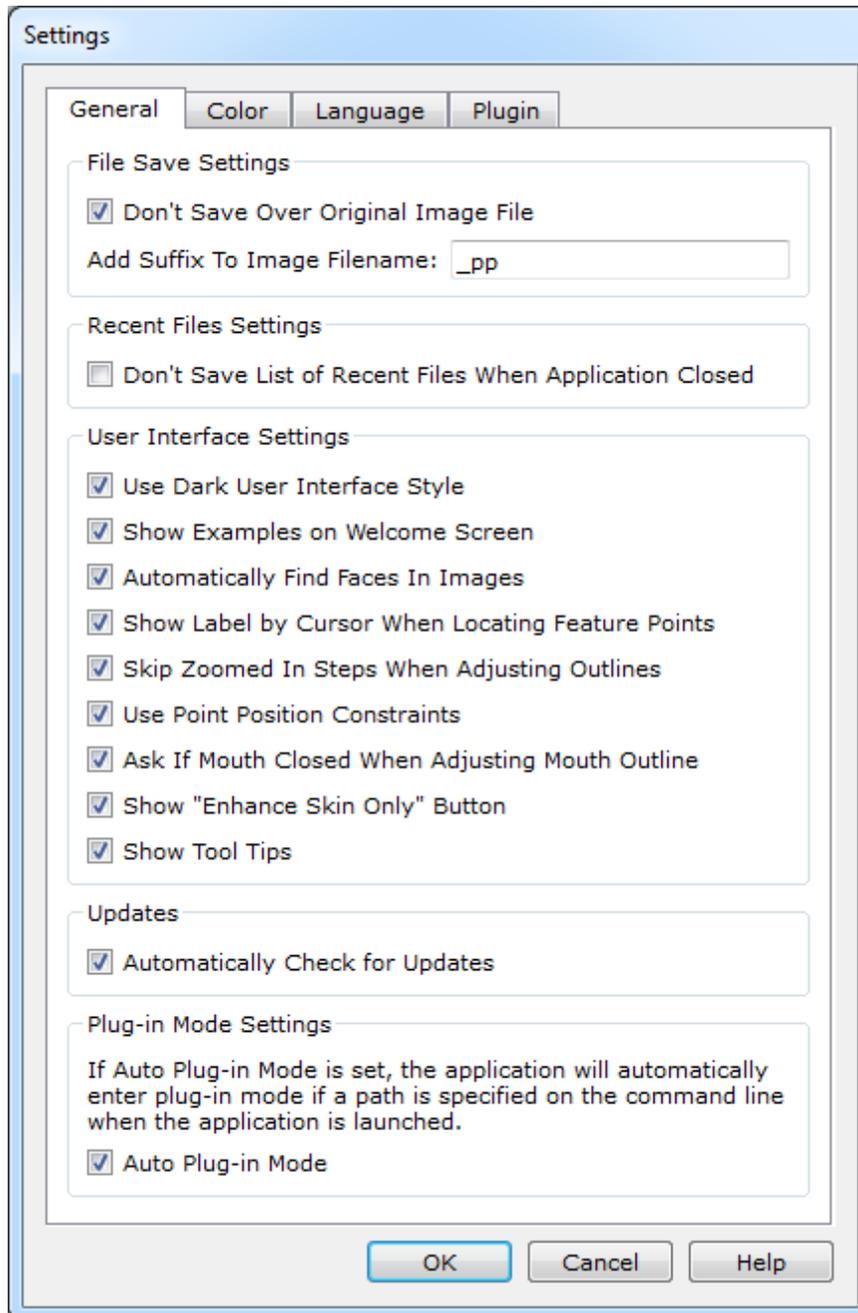
File Save Settings

Don't Save Over Original Image File - check this box and when saving a picture Portrait Professional will create a default filename that is different from the original file name.

Add Suffix to Image Filename - with the above option turned on, the new filename for saved files will be the same as the old filename with the text here added to it. By the default the suffix added is "_pp" so for example, if a file called picture.jpg is loaded, then the default saved file would be picture_pp.jpg

Recent Files Settings

Don't Save List Of Recent Files When Application Closed - check this box and no history of files opened will be saved when the application is closed.

User Interface Settings

Use Dark User Interface Style - check this box to use a dark color scheme, or uncheck this box for a more conventional Windows style.

Show Examples on Welcome Screen - check this box to see the example images on the Welcome Screen.

Automatically Find Faces In Images - check this box to have faces automatically found in images when they are opened. If this box is unchecked, you will need to manually locate all faces in your images before they can be enhanced.

Show Label by Cursor When Locating Feature Points - check this box and when placing the main 5 points on the face, the cursor will have extra text next to the points to help you.

Skip Zoomed In Steps When Adjusting Outlines - check this box to skip the steps where the image is zoomed in to the left eye, right eye, and nose & mouth after the first 5 points have been located. Note: this does not affect profile views (where the face is side on).

Use Point Position Constraints - check this box to force some points to lie along particular lines when they are being moved. This can help prevent points from being positioned in the wrong place, although experienced users may get better results if this is turned off.

Ask If Mouth Closed When Adjusting Mouth Outline - check this box and when adjusting the points on the mouth Portrait Professional will prompt you with a question about whether the mouth is open or closed. Note that even with this option on, you can press the spacebar to select that the mouth is open and move on to the stage of actually moving the mouth points. After doing this, if the mouth really is closed, just move the lip points together and they will merge to form a closed mouth shape.

Show "Enhance Skin Only" Button - this box needs to be checked for the "Enhance Skin Only" button to be shown at the Select Gender 54 stage.

Show Tool Tips - uncheck this box to turn off all the tool tips (the pop-up help that appears when you hover the mouse over a control).

Updates Settings

Automatically Check for Updates - if this is checked, then Portrait Professional will periodically check to see if a new version of Portrait Professional is available. If an update is available, a button will be shown on the Welcome screen. When you click the update button, your web browser will be opened showing information about the update that is available.

Plug-in Mode Settings

Auto Plug-in Mode - [Studio edition only] If Auto Plug-in Mode is set, Portrait Professional will enter plug-in mode 22 if a path is specified on the command line when launching the application.

3.3.3.2   Color Settings

To bring up this dialog, select **File > Settings** menu command and the Color tab.
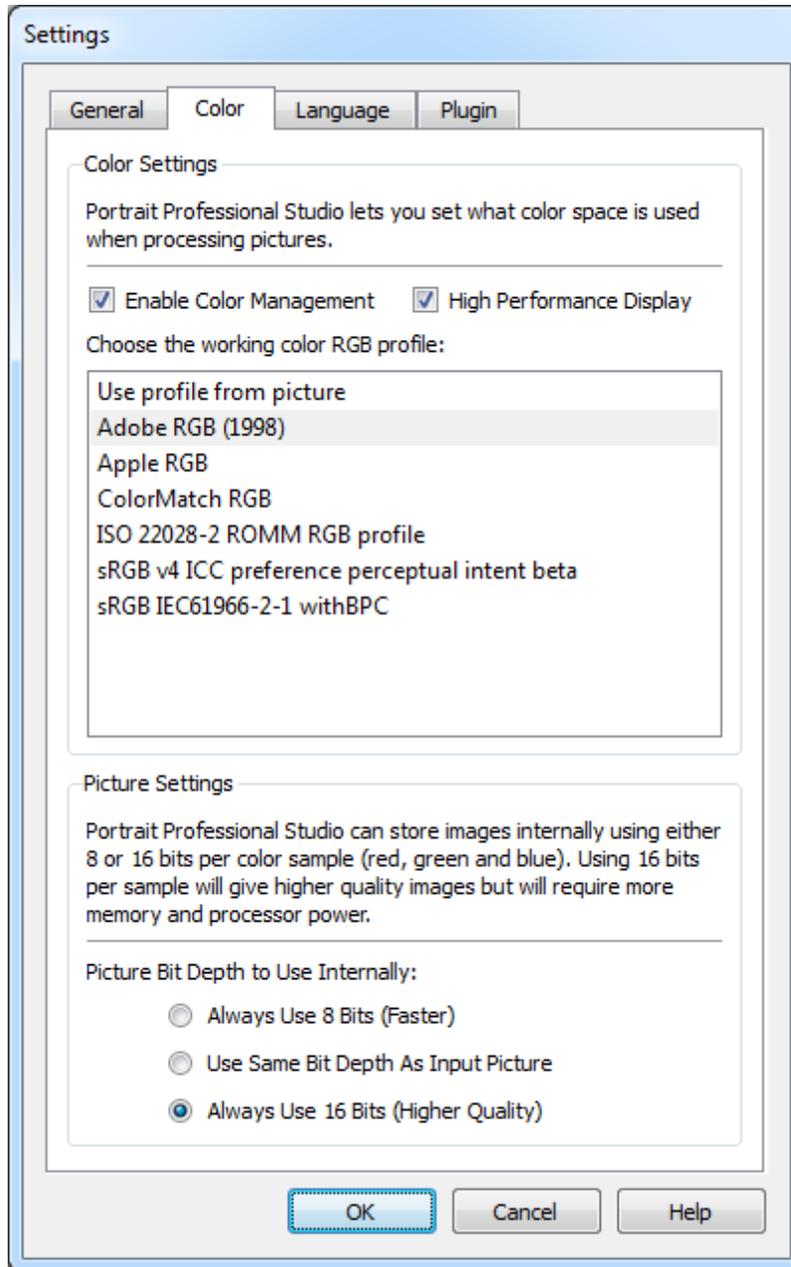
Color management helps to ensure that the colors you see on your monitor are as close to how they should appear as possible.

In addition, you can configure what working color profile Portrait Professional Studio uses internally. This affects the *color gamut*, which is the range of colors that can be represented.

For maximum speed, select the "High Performance" option. This allows Portrait Professional Studio to optimize the use of color profiles for the screen when being used interactively. Regardless of this setting, your

chosen working profile will be used when saving files.

You can also configure the *color depth* used by Portrait Professional Studio. This is the number of bits used to represent each color sample.

Each pixel consists of 3 color samples (red, green and blue), so:

- 8 bits per color sample is 24 bits per pixel.

- 16 bits per color sample is 48 bits per pixel.

Note: this dialog is only available in the Studio editions of Portrait Professional. The standard edition of Portrait Professional works with Color Management turned off and 8 bits per color sample. What this means is that colors displayed on the screen may not be accurate, however color profiles are preserved which means that the images saved from Portrait Professional will have the same color profiles as the images that were originally loaded. If using these images in other color managed programs the colors will look correct.

An explanation of color management

When color management is turned on, Portrait Professional will ensure that the colors on the screen are correctly displayed according to the color profile specified in the image and your monitor profile. For the very best results, calibrate your monitor rather than using the profile that is provided by the manufacturer of the monitor.

For example, if you have a picture on your disk that you have saved with an sRGB profile and you also have the same picture saved with an Adobe (1998) profile, then they will be displayed with slightly different colors with color management turned off, but when color management is on they will look the same. In fact with color management on the two pictures could still look slightly different due to out of gamut colors being lost when the images were created, or rounding errors caused by the different color profile conversions in the process of displaying the images. However any changes would be very slight and normally not noticeable.

If you print a lot then a good rule of thumb is to use Adobe (1998) as your working profile, or if you mainly view images on your monitor then sRGB is more suitable. In either case it is best not to convert from one color profile to another without a reason, because during the conversion there may be colors that become out of gamut (i.e. they cannot be represented in the new color space) and so they will be lost, and also rounding errors could be introduced which would appear as color banding over smooth gradients in the image.

3.3.3.3   Language Settings

To bring up this dialog, select the **File > Settings** menu command and choose the Language tab.
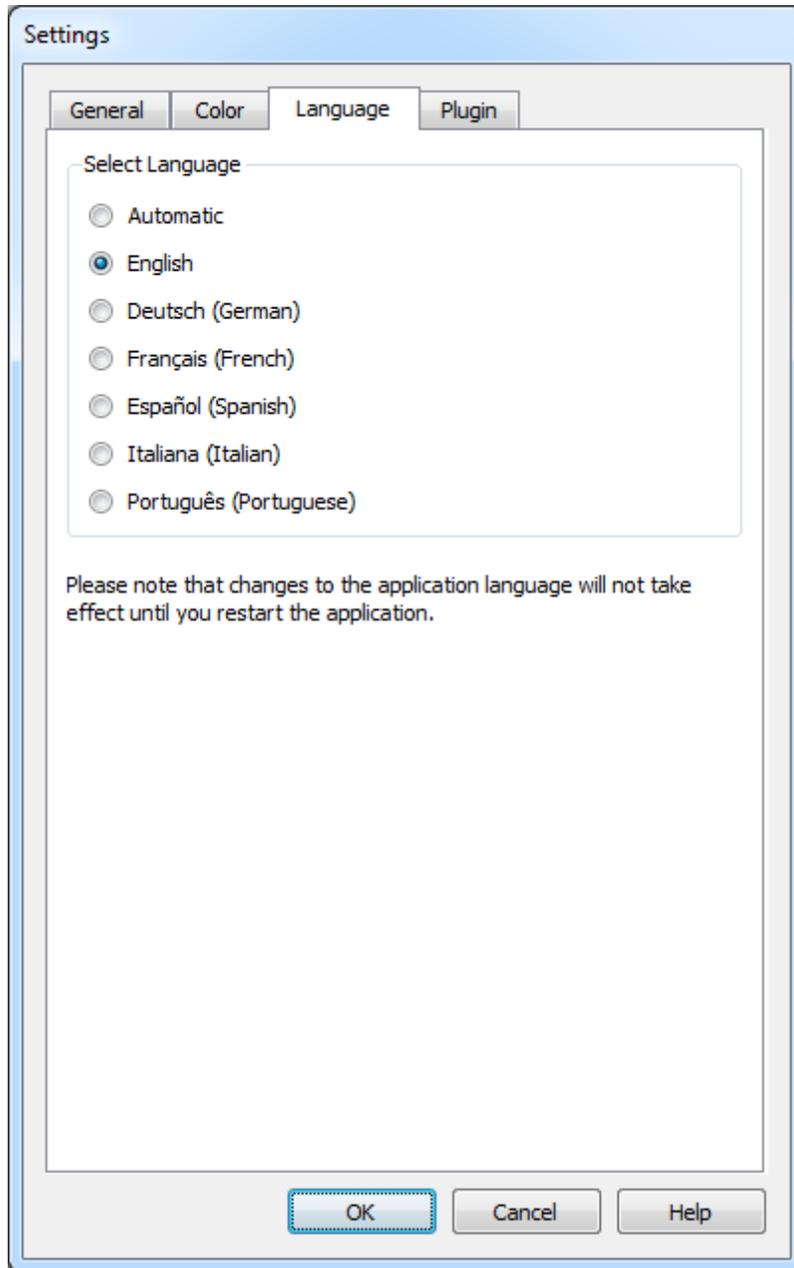
If you select the option *Automatic*, the language will be automatically set to the same as the language of your computer if that language is supported, otherwise English will be selected.

3.3.3.4   Plugin

Studio Edition Only 9

To bring up this dialog, select **File > Settings** menu command and the Plugin tab.

Settings

| General | Color | Language | Plugin |

Run Photoshop Plug-in Installer

To use Portrait Professional as a plug-in from Photoshop, the plug-in needs to be installed.

If you did not do this when Portrait Professional was first installed, or if you have installed a new version of Photoshop, you can re-run the installer by pressing the button below.

[Run Plug-in Installer]

[OK] [Cancel] [Help]

This dialog lets you install the plug-in filter that makes Portrait Professional available in Photoshop.

You will have been offered the option to install the plug-in when Portrait Professional was installed. This panel lets you re-run the plug-in installer. This lets you install the plug-in if you chose not to install it when Portrait Professional was installed, or if you have since installed a new version of Photoshop.

The plug-in installer will automatically detect which version(s) of Photoshop you have installed. You just need to check the box next to each application that has been detected to install the plug-in for that application.

You will also be offered the option to select a folder into which to install the plug-in. This is useful if you want to install the plug-in for other applications that you know are compatible, or if you have an install of Photoshop that was not detected automatically for some reason.

3.3.4 Save Sliders

To bring up this dialog, press the **Save Your Sliders** button in the Saved Sliders Controls 33.
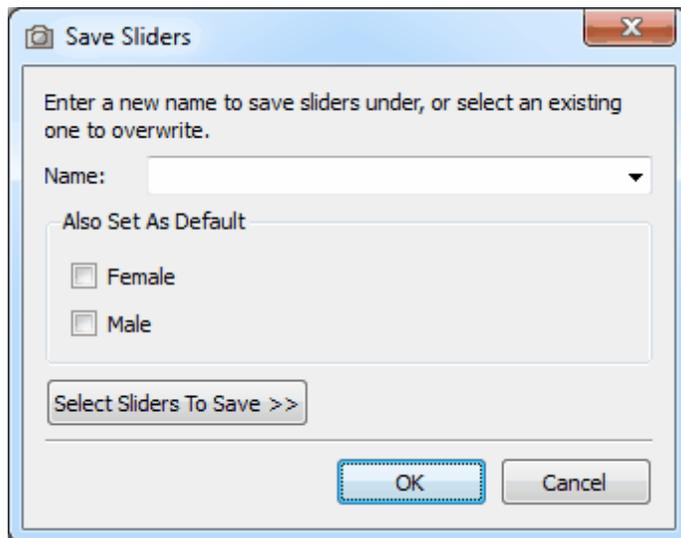
Enter a name, and when you press OK the current slider values will be saved with the other Saved Sliders.

If you enter the name of an existing Saved Sliders setting, it will be replaced.

If you also want to make the current slider values the default for female or male faces, then check the appropriate box before pressing OK.

By default, all slider values are saved. If you want to save just a subset of the sliders, press the **Select Sliders To Save** button. This will expand the dialog as shown below.
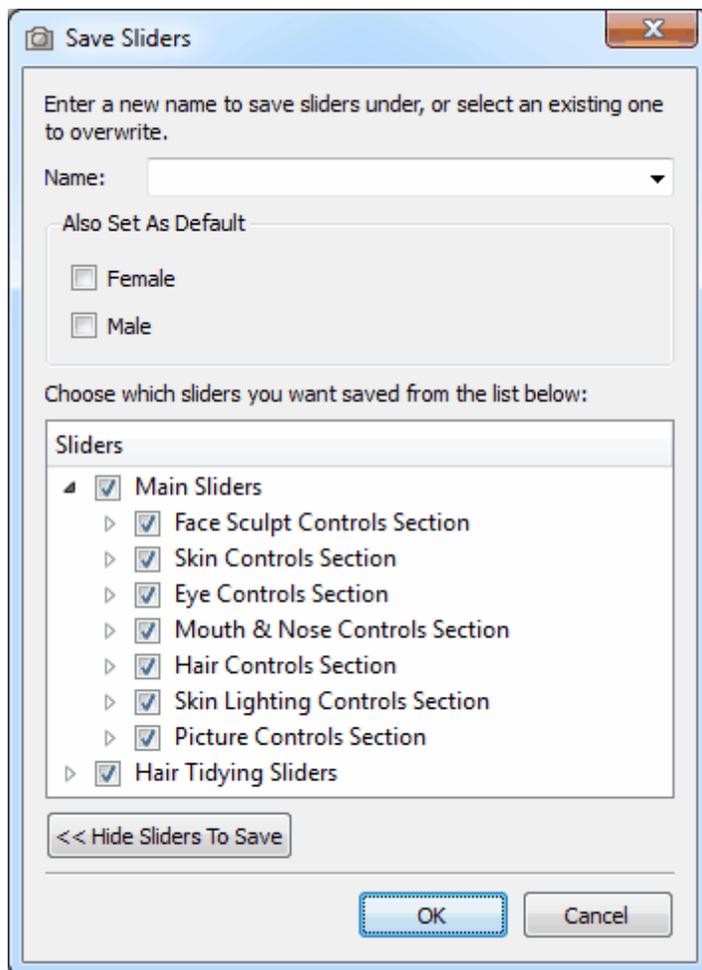
Click in the checkbox next to each slider to toggle between saved (checked) and not saved (unchecked).

If you click in the checkbox of a slider that has sub-sliders, all the sub-sliders will be set to the same.

3.3.5 Manage Saved Sliders

To bring up this dialog, press the MANAGE button in the Saved Sliders ⌐33⌐ Controls.
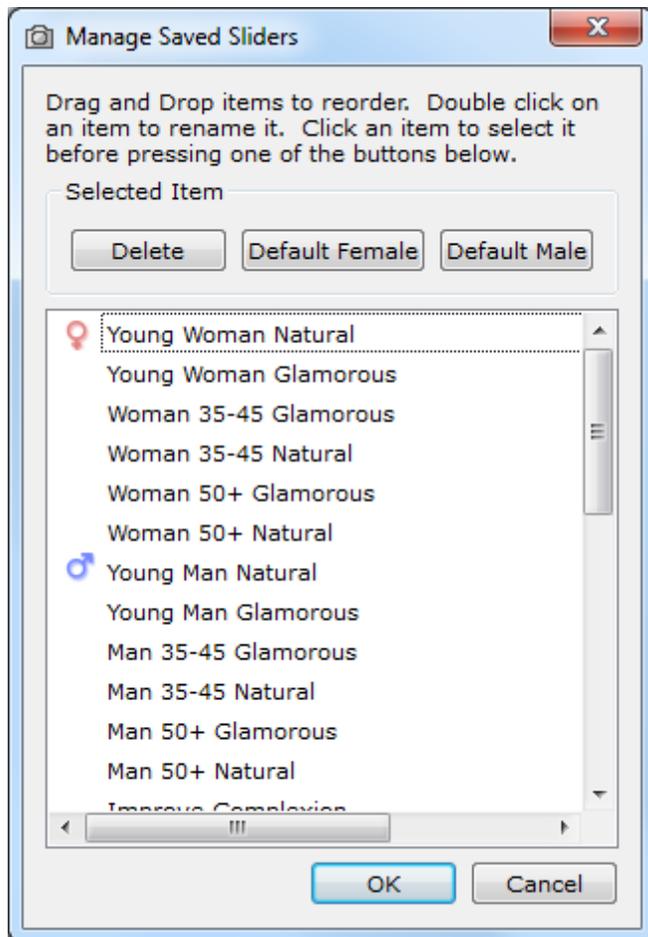
This dialog shows all the Saved Sliders settings, except the built-in "Reset To Original Image" which cannot be changed.

To rename a Saved Sliders setting, double click it's name in the list, then type the new name.

To re-order the Saved Sliders, you can drag them to new positions in the list.

To delete a Saved Sliders setting, click on the one you want to delete so that it is highlighted and then press the **Delete** button.

To set a Saved Sliders setting as the initial values to use when a new face is loaded, click on the one you want and then press either the **Default Female** or **Default Male** button.

3.3.6 Skin Area

To bring up this dialog, press the **Recalculate Skin Area** button at the bottom of the Skin Selection Tools ⌐52⌐, or choose the **Change Skin Selection Area** command from the Full Body Skin ⌐28⌐ menu.
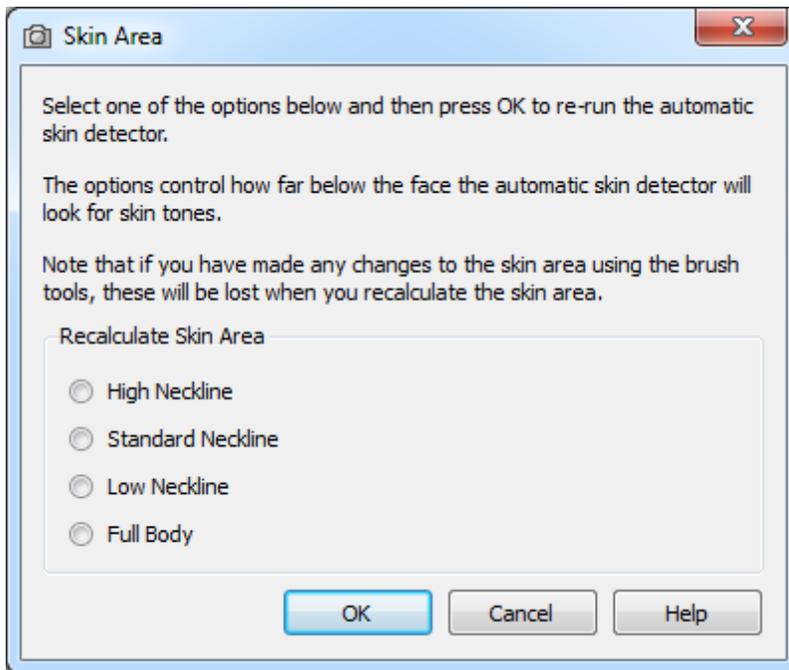
The **Show Skin Area** checkbox lets you show or hide the skin area as a blue overlay on the enhanced image. This is the same as the **Show Skin Area** button in the Skin Controls 38 section.

To recalculate the skin area, select one of the options and press the **Recalculate** button.

The options control how far below the face that Portrait Professional will look for skin tones.

An alternative to recalculating the skin area is to use the Extend and Cut Back tools in the Skin Controls section.

Note: if you recalculate the skin area, any changes you previously made using any of the tools in the Skin Controls section will be lost.

3.3.7 Batch

Studio Edition Only 9

To bring up this dialog, select **File > Open Batch...** menu command.

PortraitProfessionalStudio

Add Files...   Remove All   Remove Completed

    DSC_0014.NEF – C:/Users/Mark/Pictures/Test Images
    DSC_0424.NEF – C:/Users/Mark/Pictures/Test Images

Selected Item(s)

    Remove   Move Up   Move Down

Save Options

Save As: Tiff, Lossless Compressed, 16 Bits Per Sample   Change...

☐ Also Save Session (.pp file)

Save Folder

☑ Save to Same Folder As Original File

Folder Path: Browse...

                                              OK   Cancel

This dialog lets you set up a list of files to work through. You can also set the save options to use when each file is saved.

Adding Files

To add files to the batch list, press the Add Files button. This brings up a file open dialog that you can use to select the files to add.

The files in the batch are shown in the list at the top of the dialog.

Using the Batch List

When you press the OK button, your changes are saved and the first file in the list that has not already been completed will be opened.

When you have finished enhancing that image, select the **Save And Open Next** command from the File 26 menu. This will save the current image using the options selected, and then automatically open the next file in the list.

If you open the Batch dialog again, you will see a check against the file you have just completed.

The following icons can appear next to the files in the list:

	Pending - file is waiting to be processed
✔	Completed - file has been enhanced and saved
✖	Failed - file could not be opened
⬮	Skipped - file was closed without saving

You can reset a file's status back to "pending" by right clicking on the file, and selecting **Reset Status** from the pop-up menu.

Once you have completed all the files in the batch, press the **Remove Completed** button to remove them from the list.

The files in the batch and the batch settings are saved when Portrait Professional is closed, so you can carry on working on the files in the batch the next time you run Portrait Professional.

Reorganizing the Files

The files will be opened in the order shown in this list. If you want to re-order the files, select one or more files in the list and press the Move Up or Move Down button.

You can also remove the selected items by pressing the **Remove** button. Note that this only removes the files from the list, it does not delete the files from the disk.

To select more than one file in the list, hold down the CTRL key when selecting another file. Alternatively, you can hold down the SHIFT key to add all files between the current file and the one clicked on.

Save Options

Files are saved in the format shown in the Save Options section. Press the **Change** button to bring up a dialog that lets you change the save format.

If you check the **Also Save Session** box, then a Portrait Professional session file (.pp extension) will also be saved, which will save the image along with all the point positions and all the slider values. You can open a session file to continue enhancing an image without having to position the face points again. The session file will be saved in the same folder and with the same name as the enhanced image, but it will have a .pp extension.

The files will be saved to the same folder as the original file if **Save to Same Folder As Original File** is checked. If you want to save the enhanced images to a different folder, uncheck the box and enter a path in the **Folder Path** field. You can press the Browse button to bring up a folder dialog that lets you select a folder to save to.

The enhanced image will be saved to a file with the same name as the original file. If you have specified a suffix to add in the <u>File Save Settings</u> 56, this will also be added.

3.4   Tools Reference

This section describes the tools available in Portrait Professional.

These tools are available when <u>enhancing an image</u> 21, and work in the enhanced ("After") image view.

When you change tool, you change what will happen if you click in the enhanced image view.

Each tool has a different cursor shape, so that you can easily see which tool is selected.

Pan Tool 68	Pans the view of the image. This is the default tool if no other tool is selected.
Brush Tools 68	Let you paint in the enhanced image to touch-up or restore spots.
Area Brush Tools 69	Let you paint in the enhanced image to refine the skin or hair areas.
Crop Tool 70	Used to crop the picture.

3.4.1   Pan Tool

The Pan tool is available when you are enhancing an image 21.

The Pan tool is the default tool when no other tool is selected.

To use the Pan tool, click and drag in the enhanced image to change which part of the image is visible.

The Pan tool can be used as an alternative to the Zoom Control 31.

The Pan tool is the only tool that also works in the original image view, if you have the side by side layout selected.

3.4.2   Brush Tools

The brush tools are available when you are enhancing an image 21. They are called brush tools since they work like a paintbrush. You need to move the cursor over the area where you want to "paint" with the brush, then press and hold the left mouse button while you drag the mouse over the area you want to affect.

There are two types of brush tools. This page describes the standard brush tools which are used for making changes to how the skin is enhanced in particular areas. The other type is the Area Brush Tools 69, which are used for selecting the areas where the skin and hair enhancements are made.

Touch-up and Restore Brushes

The following brushes are available from the bar above the main image view.

| Touch-Up Brush | Use this to paint over spots or blemishes in the skin that have not been eliminated automatically. |
| Restore Brush | Use this to paint over spots in the skin that have been removed, but that you would like to keep. |

Brush Controls

To select a brush, press the appropriate button.

Press the button again to deselect the brush (goes back to the Pan tool 68).

The brush tools work like a paintbrush. You use them to paint an area on the enhanced image, to which the

brush effect is applied.

To use a brush, press the mouse left button while the cursor is in the enhanced image, and drag the mouse while holding the button down. Release the mouse button to finish the brush stroke. The area that the cursor passes over while you do this is the area that you have "brushed".

Brush Size

The brush size controls how big an area is affected by the brush. You can see how big this area is from the size of the cursor circle when using the brush.

Brush Strength

The brush strength (opacity) controls how strongly the brush effect is drawn. A strength of 100 means the full brush effect is applied in one stroke. You can set a smaller strength to make gradual changes.

For example, if you set the strength to 50 when using the Touch-Up Brush, then when you paint over a spot only half of the maximum spot removal effect will be applied. If you release the mouse and paint over the spot again, then 50% more spot removal processing will be applied. This lets you do just enough to remove the spot, but without applying too much effect which might over-blur the surrounding area.

When a brush tool is selected, controls to set the brush size and strength will appear near the button used to select it.

Brush Undo

When you use any brush tool, the last brush stroke can be undone using the Edit Menu 28 Undo command, or by pressing **Control-Z** on the keyboard. Further undo will undo previous brush strokes and other actions that you have performed going back in the history of the current session. After an undo you can also redo to get back where you were from the Edit Menu 28 Redo command or **Control-Y.**

Tablet Support

Portrait Professional supports a tablet and stylus. If you have a tablet and stylus you will normally find this easier to use when drawing.

3.4.3   Area Brush Tools

The area brush tools are available when you are enhancing an image 21. The area brush tools are used to adjust the areas where the skin or hair enhancements are made. Portrait Professional will automatically select the skin and hair areas, but depending on the picture it may not always get these areas exactly right. The area brush tools are provided to let you manually fix these areas.

The area brush tools are "smart" brushes, in that they will automatically detect the edges of regions.

You will see when you select an area brush tool that the position of the brush is shown by two circles. The outer circle is the area where the brush will be applied. The inner area is the "detector" region. When you paint with the brush, the detector region is painted as normal. The region between the inner circle and the outer circle will only be painted for areas which are a similar color to the color in the inner region. This means that if you are painting along an edge, all you need to do is keep the detector region completely inside the area you are painting, and the brush will automatically paint up to the edge but not beyond it, even if the outer circle of the brush goes beyond the edge.

While you are painting with a smart area brush, you can press and hold the ALT key to lock the position of the detector. This is very useful when painting very fine detail such as strands of hair.

To view or fix the skin area 52, press the **Show Skin Controls** button to open the Skin Controls 38 section, and then press the **View/Edit Skin Area** button.

Extend Skin Area	Lets you add to the area that will be treated as skin during enhancement.
	Use this to paint over areas of the photo that are skin, but that have not been automatically detected as skin.
Cut Back Skin Area	Lets you fix areas that should not be treated as skin during enhancement.
	Use this to paint over areas of the photo that are not skin, but that have been automatically detected as skin.

To view or fix the hair area 52, press the **Show Hair Controls** button to open the Hair Controls 48 section, and then press the **View/Edit Hair Area** button.

Extend Hair Area	Lets you add to the area that will be treated as hair during enhancement.
	Use this to paint over areas of the photo that are hair, but that have not been automatically detected as hair.
Cut Back Hair Area	Lets you fix areas that should not be treated as hair during enhancement.
	Use this to paint over areas of the photo that are not hair, but that have been automatically detected as hair.

3.4.4   Crop Tool

The Crop tool is available when you are enhancing an image 21.

To select the Crop tool, press the Crop tool button in the Picture Controls 50 section.

The Crop tool is used to adjust which area of the whole picture you are going to use for your portrait. You may need to do this to cut out distractions, so that the portrait focuses on the person in the picture. When you crop you don't actually lose anything from the picture, you just change the area displayed and you can always come back and re-adjust the crop if you have got it wrong.

Upon opening the tool, the crop grid will be overlaid on your picture.
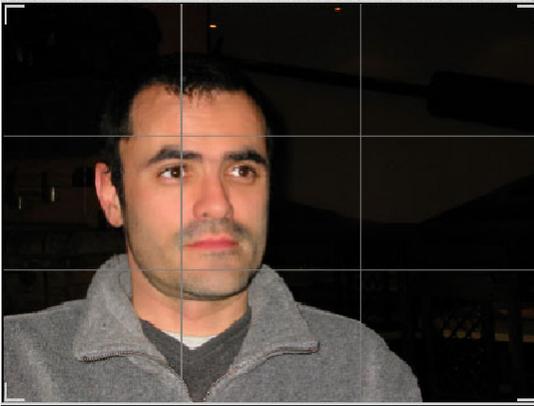
This grid shows the part of the picture that will be displayed, divided into thirds for reference. Adjust the grid by clicking and holding on any point on the grid and dragging it to the position you want.

Once you are happy with the way the crop looks, click on **Commit** to make the changes. If you want to cancel the changes you have just made, click on **Discard**.
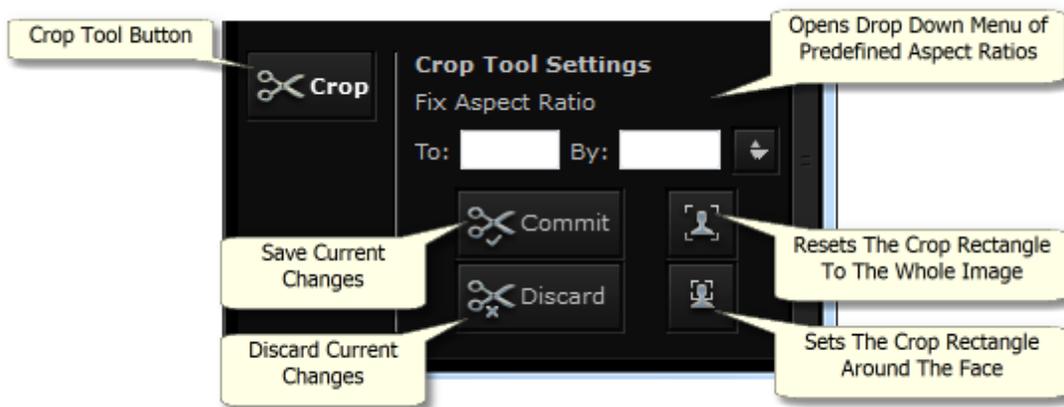
TIP: Professional photographers will usually place the eyes or the mouth in a portrait on the "third" lines. This gives a more pleasing balance to the picture.

You can also fix the aspect ratio of the crop using the **Fix Aspect Ratio** function in the crop control panel. For example you may want to print out a 6x9 inch picture (this is a standard photographic print size), so want to work in this aspect ratio. To do this set the Fix Aspect Ratio values by clicking in the To: and By: boxes and entering the ratio you want. Once you have done this the crop grid will automatically stay in the that ratio as you drag it around.

3.5 Third Party Credits

Portrait Professional uses a number of third-party libraries, which are acknowledged here. We offer our thanks to the authors for providing these valuable resources.

dcraw

RAW image reading is provided by dcraw.

```
Copyright 1997-2012 by Dave Coffin, dcoffin a cybercom o net
```

tifflib

TIFF image reading and writing is provided by libtiff.

```
Copyright (c) 1988-1997 Sam Leffler
Copyright (c) 1991-1997 Silicon Graphics, Inc.

Permission to use, copy, modify, distribute, and sell this software and its
documentation for any purpose is hereby granted without fee, provided that (i) the
above copyright notices and this permission notice appear in all copies of the
software and related documentation, and (ii) the names of Sam Leffler and Silicon
Graphics may not be used in any advertising or publicity relating to the software
without the specific, prior written permission of Sam Leffler and Silicon Graphics.

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR
OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS
FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL,
INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER
RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY
OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE
USE OR PERFORMANCE OF THIS SOFTWARE.
```

jpeglib

JPEG image reading and writing is provided by jpegtiff.

```
This software is based in part on the work of the Independent JPEG Group.
```

```
This software is copyright (C) 1991-2011, Thomas G. Lane, Guido Vollbeding.
```

zlib

Zlib compression support is provided by zlib.

```
(C) 1995-2012 Jean-loup Gailly and Mark Adler
```

Adobe DNG SDK

DNG reading is provided by the Adobe DNG SDK.

```
Lossless JPEG code adapted from:

Copyright (C) 1991, 1992, Thomas G. Lane.
Part of the Independent JPEG Group's software.

Copyright (c) 1993 Brian C. Smith,
The Regents of the University of California
All rights reserved.

Copyright (c) 1994 Kongji Huang and Brian C. Smith.
Cornell University
All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation
```

for any purpose, without fee, and without written agreement is hereby granted, provided that the above copyright notice and the following two paragraphs appear in all copies of this software.

IN NO EVENT SHALL CORNELL UNIVERSITY BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF CORNELL UNIVERSITY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

CORNELL UNIVERSITY SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND CORNELL UNIVERSITY HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

Copyright © 2006 Adobe Systems Incorporated. All rights reserved.

Adobe is a registered trademark or trademark of Adobe Systems Incorporated in the United States and/or other countries. Windows is either a registered trademark or a trademark of Microsoft Corporation in The United States and/or other countries. Mac is a trademark of Apple Computer, Inc., registered in the United States and other countries. All trademarks noted herein are the property of their respective owners.

Adobe XMP SDK

The Adobe XMP SDK is used by the Adobe DNG SDK

Copyright 2009 Adobe Systems Incorporated and others. All rights reserved. The original version of this source code may be found at http://adobe.com.

lcms library

ICC color profile handling is provided by lcms.

Little CMS

Copyright (c) 1998-2007 Marti Maria Saguer

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

OpenCV

Automatic feature finding makes use of the OpenCV library.

3.6   Supported File Types

Portrait Professional can read and write the following types of files:

Type	Extension	Description
JPEG	.jpg; .jpeg	Image file type that uses lossy compression
TIFF	.tif; .tiff	Image file type that is uncompressed or uses loss-less compression Note: TIFF files containing images that have 16 bits per color sample (48 bits per pixel) are only supported in the Studio edition.
PPX	.ppx	Proprietary file type used by Portrait Professional to store a session

Studio Edition

In addition, Portrait Professional Studio supports reading the following camera RAW files:

Manufacturer	Type
Adobe	.dng
ARRI	.ari
Canon	.crw; .cr2
Epson	.erf
Fuji	.raf
Imacon	.fff
Kodak	.tif; .kdc; .dcr
Mamiya	.mef; .mos
Minolta	.mrw
Nikon	.nef
Olympus	.orf
Panasonic	.raw; .rw2
Pentax	.ptx; .pef
Phase One	.tif; .iiq
Red	.r3d
QuickTake	.qtk
Sigma	.x3f
Sony	.arw; .srf; .sr2

3.7   Keyboard Shortcuts

Portrait Professional provides the following keyboard shortcuts at the various stages of the application.

Menu Commands

CTRL+O	**File > Open** command.

F4	Studio Edition Only 9 **File > Open Batch** command.
CTRL+S	**File > Save** command.
CTRL+W	**File > Close** command.
CTRL+E	**File > Enhance Another Face In This Photo** command.
CTRL+Z	**Edit > Undo** command.
CTRL+Y	**Edit > Redo** command.

Start Screen

SPACE BAR	Brings up File Open dialog to let you select the file to open.

Select Gender

f	Sets face as **female**, then goes to Locate Features step.
m	Sets face as **male**, then goes to Locate Features step.

Locate Features

No keyboard shortcuts

Adjust Outline

SPACE BAR	Goes to the next feature to adjust.
.	Skip to the end of the Adjust Outline stage.

Enhance Photo

+	Zoom in.
-	Zoom out.
ENTER (while held)	Flips enhanced image view to show original image.
a	Shows/Hides Skin Area.
t	Selects Touch-Up tool.
r	Selects Restore tool.
s	Selects Extend Skin Area tool.
d	Selects Cut Back Skin Area tool.
h	Selects Extend Hair Area tool.
j	Selects Cut Back Hair Area tool.

c	Selects Crop tool.
[	Make brush radius smaller (when a [brush tool] 68 is selected).
]	Make brush radius larger (when a brush tool is selected).
0-9	Change brush strength (when touch-up or restore brush tool is selected).
ESC	De-selects the currently selected tool.
SPACE BAR (while held)	When a brush tool is selected, temporarily switches to the pan tool.
SHIFT (while held)	When a brush tool is selected, temporarily switches to the opposite brush.
ALT (while held)	When a smart brush is selected, temporarily locks the detector. This is useful when brush fine detail such as strands of hair.

Part IV

4 Installation Guide

Once you've downloaded Portrait Professional, the installer will guide you through the process. This section will help you through the various points of the installation procedure.

Step 1 - Running the Installer

Navigate to the folder the installer was saved to and double click the file to begin the installation process. Windows will ask you if you want to run the file, it will be signed by Anthropics Technology Ltd. Select **Continue** to progress to the installation:
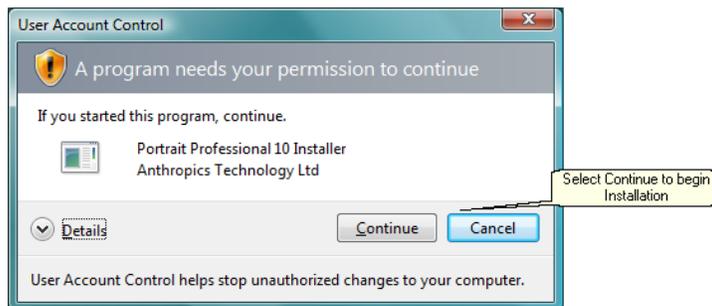
Windows User Account Control

Step 2 - Installing Portrait Professional

• Select the language you would like your installation to be in and click **OK**.
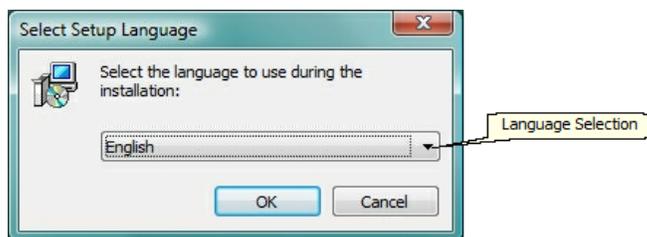
Language Select Screen

Once the installer has been opened, you will be greeted by the Welcome page.

• Select **Next >** to progress to the Anthropics End User License Agreement.

Welcome Screen

You cannot install Portrait Professional unless you agree to the terms of the license.

- To accept the license agreement and continue installation, select "**I accept the agreement**" and then click **Next >**.

End User License Agreement

The next screen will ask you to select the installation location. The installer will automatically choose a location for Portrait Professional, but you can also select a Custom install location for Portrait Professional.

- Once you have selected the installation path, click **Next >**.

You will then be asked to select a name for the Portrait Professional Start Menu folder. This will be the name of the folder that the Portrait Professional program shortcuts will be located.

- Once you have selected the Start Menu path, click **Next >**.
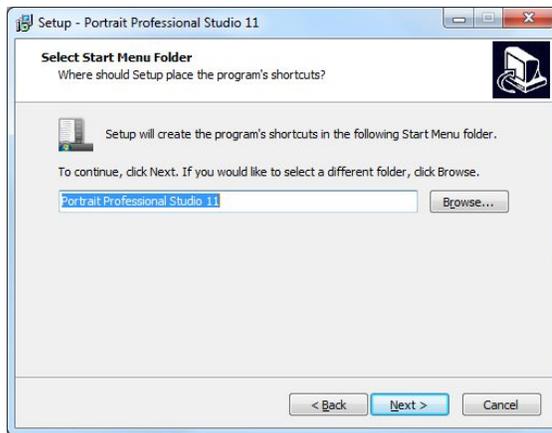
Select Start Menu Folder

The Ready to Install screen will ask you to confirm the installation settings that you have chosen.

- Click **Install** to confirm your settings and begin the installation.
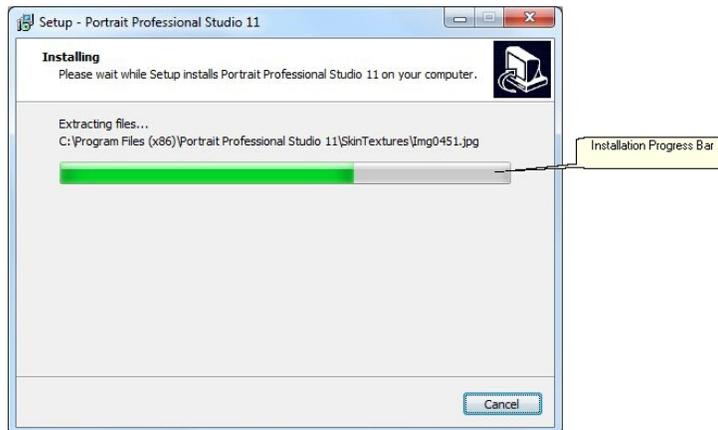
Installation Screen

The installer will finish setting up Portrait Professional on your computer and then take you to the Installation Complete Screen.

- Click **Finish** to complete the installation.

Installation Complete

After successfully installing Portrait Professional, you will be required to activate Portrait Professional before you can begin using it.

Automatic Activation

When you first start Portrait Professional, you will be greeted with an Activation Screen. You will be required to enter your activation token, which was sent to you with your Purchase Confirmation mail.
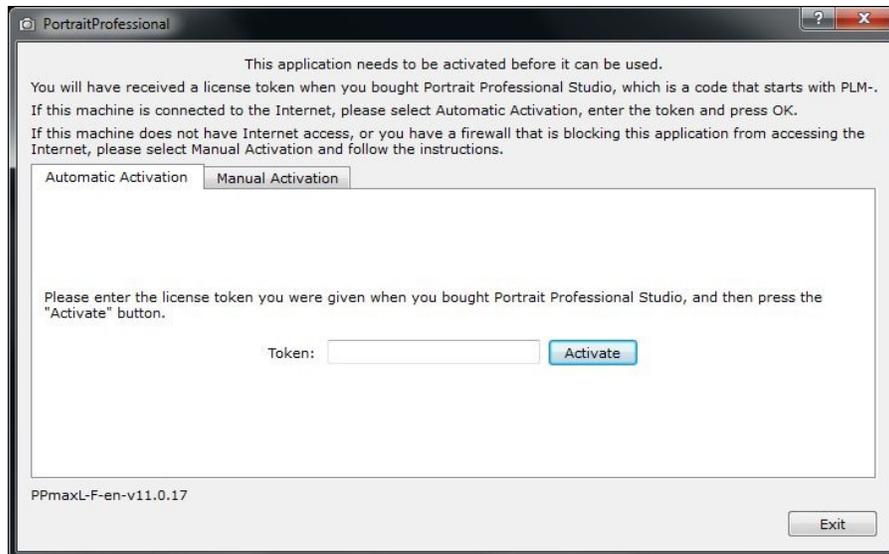
Automatic Activation Screen

Activating Portrait Professional using the Automatic activation method **requires an active Internet connection**. If you require manual activation, please refer to the Manual Activation guide below. Once you're at the Automatic Activation screen, type in the Activation token that was provided in the purchase confirmation mail and click **Activate**.

Once your token has been verified, Portrait Professional will start up and be ready for use.

If you want to activate your Portrait Professional license on a computer without an Internet connection, please refer to the Manual Activation Guide 84.

Studio Editions Only 9

If you want to use Portrait Professional as a plug-in from other applications such as Photoshop, you will also need to install the plug-in.

This is described in more detail in the Plug-in Installation Guide 86.

4.1 Manual Activation

Manual Activation

Manual activation is for use in cases where there is no active Internet connection. If you are connected to the Internet during the activation process, it is recommended to use Automatic Activation. Instructions on Automatic Activation can be found in the Installation guide 80.
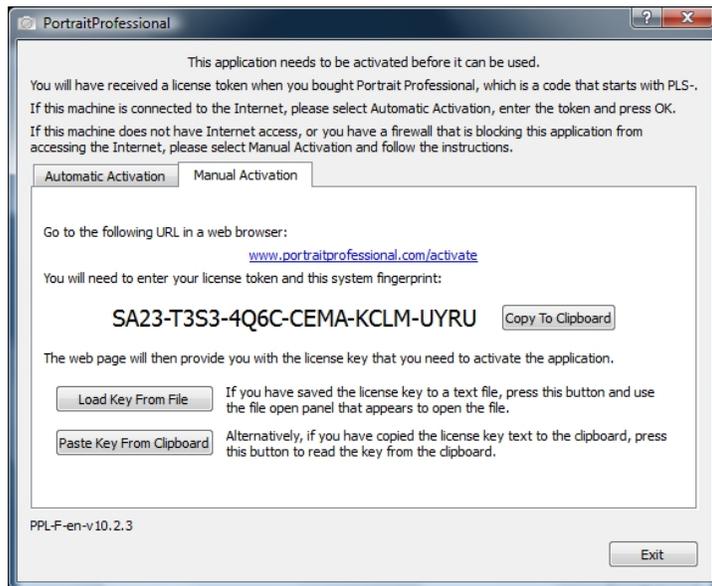
Manual Activation Screen

If you cannot activate Portrait Professional using the Automatic Activation, click the Manual Activation tab to begin the manual activation process. Begin by writing down the provided system fingerprint, which is the 24 digit code on the manual activation screen and is **unique to your computer**.

On a computer with an active Internet connection, go to http://www.portraitprofessional.com/activate and enter both the Activation Token provided in the purchase mail and the System Fingerprint provided on the Manual Activation screen.

Manual Activation Web Page

Enter the System fingerprint & the Activation token on the site & click **Get Key**. This will provide you with a link to the Download Key.

- Click **Download Key** and save the file on a USB stick so that it can be transferred to the computer without an Internet connection. The file should be named PPkey.txt.

Key Download Site

Insert the USB key with the PPKey.txt file into the computer that has Portrait Professional installed. Open Portrait Professional once again and return to the Manual Activation screen. At this point you have two choices on how you would like to activate Portrait Professional. The easier method is to click the **Load Key From File** button and select the PPKey file from the USB stick as shown below. After selecting the PPKey file, Portrait Professional should then successfully activate.
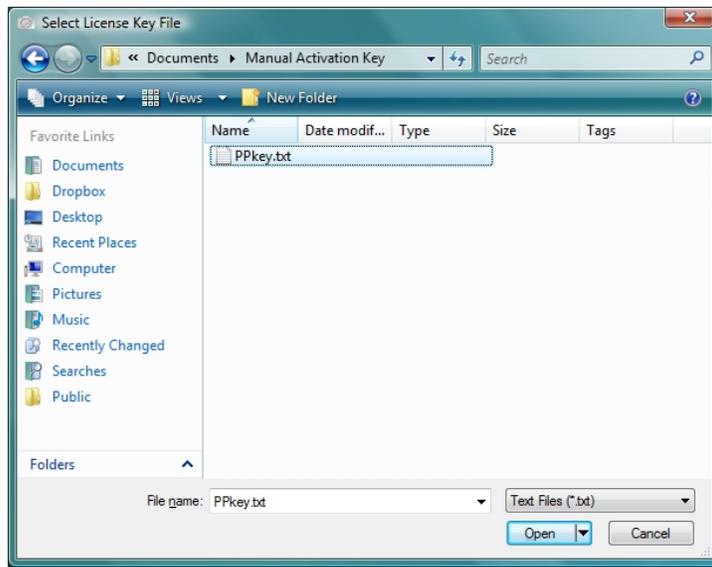
Load Key From File

Alternatively, you can also select **Paste Key From Clipboard** to manually activate Portrait Professional. With this method, you need to open the text file by double clicking the PPKey.txt file. Then press CTRL+A to highlight the text in the keyfile. Then press CTRL+C to copy the text to the clipboard. Return to the Manual Activation Screen and then click **Paste Key From Clipboard.** Portrait Professional should then successfully activate.

License Activated

4.2   Plug-in Installation Guide

Studio Editions Only 9

Installing the Portrait Professional Photoshop Plug-in

In the Studio & Studio 64 editions of Portrait Professional, you have the option to use Portrait Professional as a plug-in 22 from Photoshop and other compatible photo editing suites.

This option is available to install on the Installation Complete screen of the Studio & Studio 64 editions.

Installation Complete (Studio Edition)

To begin the plug-in installation, click **Finish** on the Installation Complete screen with the **Launch Photoshop Plug-in Installer** checkbox checked (checked as default).

Windows User Account Control

The installer will be signed by Anthropics Technology Ltd. Select **Continue** to progress to the installer.

The language select screen will appear. Select your language and click **OK** to continue.

The Welcome Screen will appear, click **Next >** to move onto the next screen.
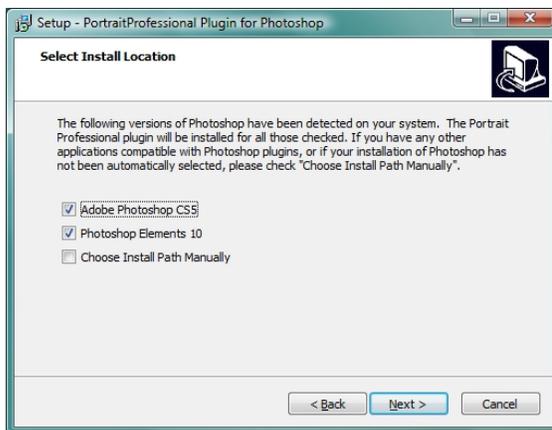
Select Plug-in Install Location

The Select Install Location screen is where you select the programs you want the plug-in to be installed into. The installer will automatically detect installed software that is compatible with the plug-in and display it as in the image above. Check the detected software boxes to install the plug-in for that respective program. You can also manually select the installation path by ticking the **Choose Install Path Manually** checkbox, which will allow you to direct the plug-in installation to a specific folder. Once you have selected the options you require, click **Next >** to progress to the next screen.

Select Destination Folder for Plug-in

If you selected **Choose Install Path Manually** in the **Select Install Location** screen, you will be taken to the **Plug-in Destination Folder** screen. On this screen you will be able to select the folder of any supported program that the plug-in has not automatically detected. Click **Browse** and select the plug-in folder of the program that you would like the portrait Professional plug-in installed into. Then click **Next >**.

Select Plug-in Type

On this screen you are prompted to select the version of the plug-in you want to be installed. The version should match the program you are installing the plug-in into. For 32-bit applications, select the 32-bit plug-in and the 64-bit plug-in for 64-bit applications. When you have made your selection, click **Next >**.
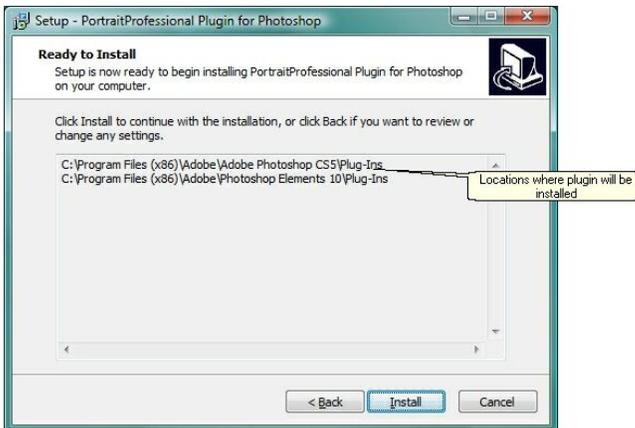
Plug-in - Ready to Install

Clicking **Install** on this screen will install the Portrait Professional plug-in into the chosen programs.
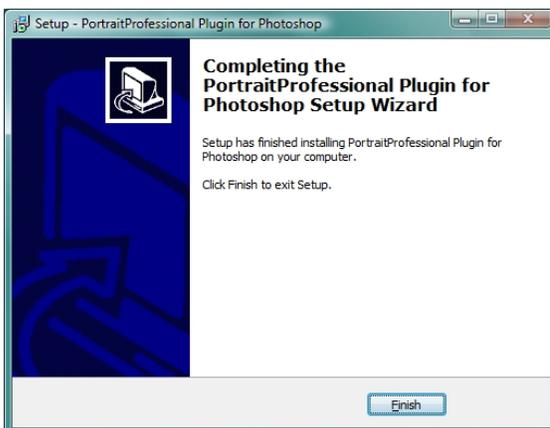
Plug-in Installation Complete

(Note: The plug-in can be installed from Portrait Professional at any time under **File> Settings> Plug-in> Run Plug-in Installer**)
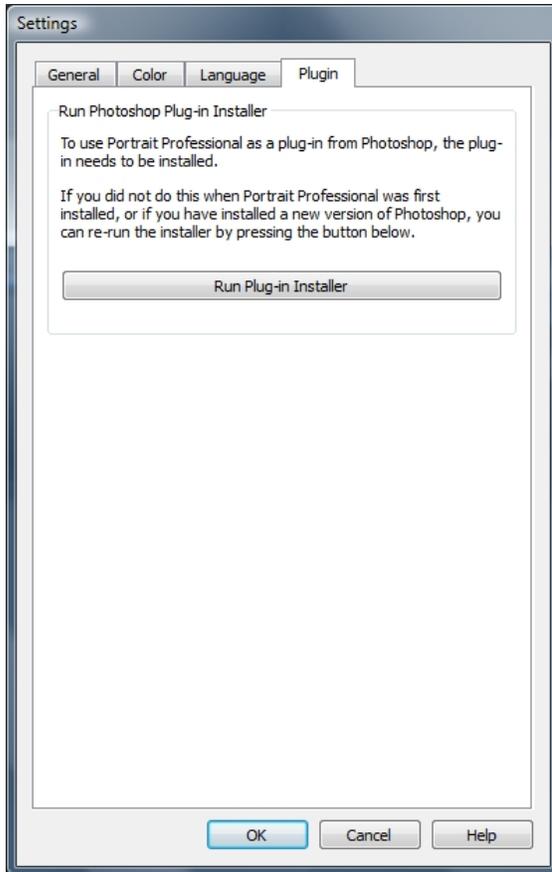
Re-installing plug-ins

If you did not install the plug-ins when Portrait Professional was installed, perhaps because you did not have the other application already installed at that time, you can install the plug-in later.

To do this, go the Plugin Settings 60 dialog, from where you can re-run the plugins installer.

Troubleshooting

If the Portrait Professional plug-in does not appear in Photoshop (or other compatible application), it may not have installed correctly. This can be caused by the plug-in being installed into the wrong folder.

To fix this, you need to find the correct folder for the plug-in to be installed into. Usually, the plug-in install location is *"C:\Program Files\<APPLICATION-NAME>\Plug-ins"* for example, *"**C:\Program Files\Adobe Photoshop CS5\Plug-ins\"**.* Once you have found the correct folder, run the plug-in Installer from the Plugin Settings 60 dialog, and select the "Choose Install Path Manually" option.

Index

- O -

- P -

- Q -

- R -

- S -

- T -

- V -

- Z -