# FaceShop<sup>®</sup> 4

## PC/Mac

### User's Manual

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The base of the FaceShop software is the patented procedure by Pantomat:

### P0200767 - METHOD OF PRODUCING THREE-DIMENSIONAL MODEL OF A HUMAN HEAD ON THE BASIS OF A TWO-DIMENSIONAL PICTURE – HPO-2002, PANTOMAT

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### About the manual

Chapter 1 – FaceShop Workflow Chapter 2 – FaceShop Advanced Operations

### System requirements

### **Required hardware**

**WIN**: FaceShop runs with the following minimal hardware: A Windows-based personal computer or laptop with the following minimal requirements:

Pentium III or IV 2 GHz 512 MB RAM internal memory True Colour video card Screen of a resolution 1024x768 250 MB free disk space

**MAC**: Macintosh computer with PPC or Intel/Mac chips running OS X 10.2 or later 250 Mb of free disk space

### Needed system software

FaceShop runs under the following system software: Windows 2000, Windows XP and Windows VISTA operating systems.

Macintosh OS X 10.2 or later

To read pdf manuals Adobe Acrobat is recommended

To watch "How-to" videos Windows Media player is recommended:

http://artzone.daz3d.com/wiki/doku.php/pub/tutorials/faceshop/fs\_basic\_video

### Installing FaceShop DAZ Studio Plugin

Use the DAZ installer. It will install the plugin and the different files in the right directories.

Manual Installation:

Place the "FaceShop" application file into "DAZ/Studio/bin" folder. Place "dzfaceshoploader.dll" into "DAZ/Studio/plugins" folder. Place "FaceShop" <u>folder</u> into "DAZ/Studio/resources" folder.

### Installing FaceShop 4 as a Standalone (for Poser, 3DMax, Maya, etc.)

Use the DAZ installer, select "Install as standalone"! **IMPORTANT!!!** 

When working with FS Standalone you MUST click on the "Classic" radio button. Program will only work in the Classic mode!!!

### What is new in FaceShop 4?

FaceShop 4 comes with two new features, MorphBrush and TextureBrush. Both tools are designed to enhance the realism of the faces you are working on.

### TextureBrush

The TextureBrush icon is located at the final screen among the tools (brush icon)

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TextureBrush let's you copy part of the texture to another place, similar to the Clone Stamp tool in Photoshop.



When clicking on the TextureBrush icon, this dialog comes up. You can set the size of the brush, its transparency and whether it is mirrored on both sides of the face.



Pick out an area that you want to clone over by holding down the shift key. Picks will appear as a crosshair. Now you can clone this area over to another area as shown.



Use Another Picture:

Better yet, you can import another picture to the left to use as a clone target. Click on the "Load Other" and load a side-view. Now you can clone from this side view as well.



### Morph Brush

Another new tool is MorphBrush. With MorphBrush you can make changes to shapes on the head.

MorphBrush dialog allows you to set the size of the brush and also the **SHAPE** of the brush!! In this instance we choose "round" shape (left arrow) and clicked on the chin of Maya that we choose to shape. Notice the green area that shows the area affected by the operation. (right arrow).



Now we can shape the chin by moving the tool in the desired direction. See how the shape enlarges or gets smaller by the amount of movement with this tool.



# 1. 1

### Workflow

1. Place either Michael 3 or Victoria 4.2 on stage. Select either figure.



2. Start FaceShop Plugin from the "Edit" menu

Load FaceShop Plugin from the Edit menu

3. FaceShop loader dialog will open (see below).

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FaceShop Loader Dialog

- 4. Enter a name for the Morph
- If you load this figure the first time, also select the body parts (Lips, SkinFace or Head) and a geometry to morph (head). You can make the dialog remember your choices by clicking on "Save Figure Settings".
- 6. Click "Accept"
- 7. FaceShop launches and shows a browser for the selection of a photo (jpg, bmp)



FaceShop Browser Dialog

- 8. Select a photo and click "Open"
- 9. Your photo will open in the Selection dialog



FaceShop Selection Dialog

- 10. In the Selection dialog you can select a resolution. Notice that the default is 512x512.
- 11. You can also crop your photo (arrow), rotate it by 90 degree increments or flip it horizontally or vertically.

#### TOOLS in the Selection Dialog (from left to right)



Rotate left (will rotate image 90 degrees to left) Rotate right (will rotate image 90 degrees to right) Flip horizontally (will flip image horizontally) Flip vertically (will flip image vertically) Notebook (will attach notes to file) Help (will open this manual on the internet) Video (will open a watch-me video on the internet) Info (will provide version and other information)

12. Click on "Next"

### 13. The Dots screen will appear



FaceShop Dots Screen

- 14. Observe the flashing blue dot on the Guide (upper left corner)
- 15. The Guide dialog will guide you to place three (3) dots on your photo (corner of left eye, corner of right eye and middle of chin).



FaceShop Dots Screen - Guide

16. After placing the third dot (middle of chin), FaceShop will place another 20 points on your screen.



FaceShop Dots Screen - 20 additional dots

17. Move the dots on the image as directed by the Guide. Move dots to tip of the nose, corner of the mouth, etc. as directed. If you don't see a part (like the left ear in this illustration, you may guess its position).

### New TOOLS in the Dots Dialog (from left to right)



Save (will save a .FAC file. It is handy if you get interrupted and want to return to your file later) Notebook (will attach notes to file) Zoom In (will zoom to selected area) Zoom Out (will zoom out from selected area) Position to original (will reset original position) Pan (will pan image)

#### BUTTONS

Clear All (will clear all dots or lines) Undo (will undo last dot or line) Redo (will redo last dot or line) Back (will take you back to previous operation) Next (will take you to next operation)



**TIP** When you cannot see a part (left ear for example), try to guess its position

- 18. Once all dots are in proper place, hit "Next"
- 19. You are done! FaceShop will automatically take it from here.
- 20. First you will see the shape change



FaceShop changing the shape of the head



FaceShop applies texture

- 21. Turn head to see it from different angles
- 22. Click OK to send new head back to Studio



New Morph and Texture applied back to Michael



**TIP** Notice that the image of JFK blinks. You can get better results if you pre-morph the head before opening FaceShop. This technique will also work with photos that show open mouth, smile, etc.

# **2** Advanced Operations

### **IMPORTANT!!!**

### When working with FS Standalone you MUST click on the "Classic" radio button. Program will only work in the Classic mode!!!

FaceShop Basic can be upgraded to Pro without quitting the application. If you choose to upgrade, you activate one of the Pro features (see below). This will automatically bring up a dialog asking you for a registration number. Click on the button "Buy" and it will take you to the store where you can purchase a Pro license. Copy the license and enter it in the license field of the dialog. Now all Pro features will be available to you.

#### Additional features in FaceShop Pro

- 1. Larger texture resolutions (1024x1024, 2048x2048, 4096x4096)
- 2. Use of many other figures in addition to Michael 3 and Victoria 4.2.
- 3. "Classic 3.5" mode using curves (default mode for "other" characters
- 4. Mirror functions (mirror one side of the face over to the other side
- 5. Front and Profile functions (Allows creating profiles either using present view or new profile photo)..

### **Basic Workflow**

- 1. Place a figure on stage.
- 2. Follow steps 3-18 as explained in Chapter 1
- 19. Select ANY texture resolution

20. Select optional "Classic 3.5" (Note: this option is shown only with Michael 3 or Victoria 4.2 – with "other" figures FaceShop operates automatically in Classic 3.5 mode). Click "Next.



Arrow shows optional "Classic 3.5" button

21. This will take you to the next screen called "Curves". In this screen you will draw "curves" over the indicated places, such as shape of eyebrow, shape of upper eyelid, lower eyelid, mouth, etc.



Curves Screen - draw curves on indicated places

22. Draw all curves as indicated.

23. Free lines: there are 5 free lines (see flashing lines on guide) that can be used to outline additional items, such as the middle line of the mouth, ears, etc.

### Correcting

### The easiest is to use the Undo button and restart the curve. If you want to correct a portion of a curve, you can do it by:

Click on the curve. After you click:

- simple click: drag the nearest node
- cntr-click on the line: clear the nearest curvenode
- shift-click on the line: add a new node to the curve

### hit Delete key - clear the curve totally

Note: The best time to correct is AFTER you finished drawing all curves and custom lines but BEFORE you hit the "Next" button. You can correct lines on the "active" window (marked by the red corners).

24. When finished click "Next".



TIP The more detailed the curve (the more vertices you place), the better the results tend to be. Also, sometimes it is a good idea to not to follow the guide and draw the head shape all the way around for better definition. Practice will tell you when to do this.

### Mirror

1. Pro offers you several choices at the final screen. One is "Mirror" Use this if you want both sides of the face to be identical. Choose the side that you like and mirror it over to the other side (left-to-right or right-to-left).



Mirror – create symmetrical heads

### New TOOLS in the Dots Dialog (from left to right)



Mirror left-to-right Mirror right-to-left Pan (will pan image)

### BUTTONS

Profile (will let you create profile either using present view or new photo)

Front (will bring you to the "curves" screen as seen in Classic 3.5). This button is best used if you are not happy with the "auto" results and want to use the more precise Classic method.

### **Profile Using Present View**

2. Use this if you don't have a profile photo of your subject. Turn head in profile

- 3. Click on the "Profile" button
- 4. Click on "Use Present View"



Profile - Use Present View

- 5. Draw first the desired profile in the left hand (image) window
- 6. Next draw the exact outline of your current model in the right hand (TempMan) window



Profile - Use Present View

7. Click "Next"



The resulting new head.

- 8. If you are satisfied with the image, accept by pressing "OK".
- 9. This will end your FaceShop session and brings you back to Studio.

### **Profile Using New Photo**

- 1. Use this if you have a profile photo of your subject.
- 2. Click on the "Profile" button
- 3. Click on "Use New Photo"
- 4. This will bring you to the "Browser" screen and lets you browse for a profile.



The Profile/Browse screen – select profile

- 5. Select new photo.
- 6. Click on the "Open" button



Profile set-up - use left or right arrow to align profile vertically





8. Using the left mouse button rotate TempMan horizontally, until you see the profile.

9. Using the right mouse button move TempMan over the photo to overlap image

10. Using the middle mouse button, size TempMan to be the same size as the photo underneath

11. Hit "Next"



Profile set-up - use left or right arrow to align profile vertically

12. Using the five "free" lines trace first the profile and then the exact outline of TempMan.

13. When finished, hit "Next" .



Profile set-up – use left or right arrow to align profile vertically

14. If you like your work, click "OK" ...

15. This will finish your FaceShop session and will bring you back to Studio." .







Morph is applied. You can still add facial expressions like smile, etc.

### How to use FaceShop Pro with Poser:

In detail:

1. Export a head (but only the head and not the eyes) from Poser.

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2. Make sure you click on "AS Morph Target" and "Include body part names".



3. Import this new OBJ into FaceShop Pro using "Load a Head OBJ button...

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### 4. Once finished in FaceShop, open Poser.

Bring up the same model that you exported (it won't work with any other) and apply Morph Target. The value that works best is between 0.5 and 0.8 (see below)



Now open Material Room to apply the texture map. Choose SkinFace for the face, and apply texture map. Choose Lips for lips. Set "Diffuse Color" to white.



### How to use FaceShop Pro with 3DS Max (versions 5 up):

In order to use FaceShop with 3DS Max, you will need to export your head meshes as OBJ files, import and process them in FaceShop Pro and then re-import the OBJs generated in FaceShop Pro. These re-imported OBJs will then be used as morph targets on your original mesh.

In detail:

1 Export a head mesh from 3DS Max. This needs to be a single mesh with no elements attached. If there are any modifiers on the mesh it is best to take a snapshot (Tools/Snapshot) and use the snapshotted mesh instead.

2 Go to File/Export and choose Wavefront (obj) as the export type.

3 Choose Group By – Material from the first drop down, and make sure Use Materials is checkmarked. All other options should be okay by default but make sure it looks like

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this:,

4 Import this new mesh into FaceShop Pro using "Load a Head OBJ button... Once finished in FaceShop, go to 3DS Max and open the scene containing the same face mesh you exported (it won't work with any other). Import Wavefront Object (obj) looking for the .OBJ face you exported from FaceShop and making sure settings are as follows:

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5. Select your original mesh and apply a Morpher modifier to it. Choose a slot and then under create morph target choose "Pick Object From Scene"

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Easiest thing to do now is press H to bring up a list of all potential morph targets. It will most likely only show you the imported OBJ object which you can then select and name as you like. After this you should choose the OBJ import and hide it like you hide any morph.

The value in the morph slot will determine the strength of the imported morph to be applied. Values from 80 to 150 work best, with 100 being the total morph applied. Sometimes there are imperfections in your morph that are best hidden with lower values, but sometimes applying values higher than 100 can result in a face that looks even more like the original, as long as you don't go too far (note that if you do want to apply morph values greater than 100 you need to go into the Global Morpher parameters and turn off Apply Limits, or adjust your limits to greater than 100).





6. Finally, open the Material Editor (or press M) to apply the texture map. Choose SkinFace for the face, and apply texture map. The mapping will depend on how you applied texture coordinates to your original mesh, but the relevant image will be stored in BMP format in the same directory as the exported .OBJ mesh. As a very general rule, use the same image as a bump map with low values (10-15). The image can be applied to both the diffuse and specular slots.

Because the Morpher applies changes cumulatively you can use all your normal targets (like for lip sync) on top of this one. Or, if you like, you can collapse everything or take a snapshot and use the resultant head on it's own. For more advanced work you can combine two or more morph targets (perhaps from different images) to either get much closer to the original or to create something totally your own.