

# FaceRig Guide v0.3 [this document is a work in progress]

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## 1. Introduction

FaceRig is a virtual puppeteer-ing program that lets you control digital characters via your own head motions and expressions filmed by a regular webcam, but also via regular computer input. We are currently focusing on the portrait, but we plan to expand to body motion in the future.

The program output can be recorded as a movie or live-streamed to Skype, Twitch, Hangouts and it should work with any service that traditionally uses a webcam input. In order to do this, FaceRig creates a virtual camera that streams out a video feed where you are replaced by the digital avatar.

## 2. Installation

The install process of FaceRig (and redeeming a key on Steam) can be tricky for someone who is new to computers (or new to Steam), so we have put together this simple step by step guide. Please read it carefully as a faulty install can lead to trouble when running the program.

If FaceRig is installed on a machine that has lower specs than the minimum requirements it might work poorly, not start at all or cause other problems. Please verify that the computer specs correspond at least to the minimum requirements before installing FaceRig.

### Minimum Requirements

**OS:** Windows® 7 or later

**Processor:** Intel® Core™ i3-3220 or equivalent

**Memory:** 2 GB RAM

**Graphics:** NVIDIA GeForce GT220 or equivalent

**DirectX:** Version 9.0

**Hard Drive:** 2 GB available space

### Step 1: Getting a Steam account and Installing the Steam Client.

Right now FaceRig is being distributed exclusively via the Steam service. If you don't already have a Steam account and the Steam client installed, please go to <http://store.steampowered.com> and follow the instructions there to install the Steam client and get a Steam account. If for some reason you are unable to use the Steam service, let us know via the contact form on the [facerig.com](http://facerig.com) website.

If you are weary about installing the Steam client, we can tell you that the Steam service is ran by Valve, a respectable U.S. based company and is (arguably) the best digital marketplace for entertainment software on PC, with tens of millions of customers.

## **Step 2: Adding FaceRig to your Steam Account.**

If you have received a program key for FaceRig, go in the Steam client in the top menu to "Games" and choose "Activate a Product on Steam". Enter the key. FaceRig should activate and appear in your software library and will begin downloading.

If the key / product code does not work, get in contact with us on the FaceRig Steam forums, on the facerig.com forums or by using the contact form on the facerig.com webpage so we can figure the problem. Do not post your key publicly prior to redeeming it or someone else might redeem it before you.

If you do not have a key and you wish to purchase one and get access to FaceRig, simply go to its Steam store page either via your preferred Internet browser at <http://store.steampowered.com/app/274920/> or just look up FaceRig in the Steam client. That's where you can purchase it.

## **Step 3: Download and Install.**

After redeeming the key or purchasing the program, Facerig should automatically be added to your Steam software library (which is on a different tab than your Steam games library). At this point it will start downloading. After the download is ready you can press "Launch" and the first time install process will start.

The install process will take a few minutes as it will install various redistributables that are needed to run FaceRig. Do not cancel, change the install options or skip any of these. Allow them to install. We will never ask you to install any funky toolbars, video players or any other type of bloatware or spyware.

You will also need to agree to the Program EULA. Please read it carefully (as you should do with the EULA of any software you install).

## **Step 4: Starting the program.**

After the install process has finished the FaceRig Launcher will start (later you can launch it by pressing the Launch button without the install process being needed again). After making any modifications you might want in the FaceRig Settings by clicking the "cogwheel button" on the launcher, you can start FaceRig by clicking the "Action" button. Loading it up may take a few seconds as FaceRig runs on a fully featured cross-platform game engine (this way we can later scale up to having multi avatar scenes, with fully animated 3d backgrounds.) If the program does not start, ends up in an infinite starting loop, starts on a black screen or presents any other erratic behavior refer to either the FaceRig Steam forum for Support or the facerig.com forum. Remember, right now FaceRig is still very much in development, and anomalies and crashes will happen every now and then.

## Step 5: Uninstalling the program

If there are errors during the install process, it is best to uninstall the program completely and re-install it again. To uninstall right click on the program name in the Steam client Software Library, chose "remove local content". After the uninstall has finished restart your computer.

To install FaceRig again just right click on the program name in the Steam client Library and chose to download and install it again.

If the the program does not start, or ends up in an infinite starting loop starts on a back screen or present any other erratic behavior refer to either the FaceRig Steam forum for Support or the facerig.com forum

## Step 6: FaceRig Virtual Webcam Initial Set-up.

If you plan to use FaceRig with online communication software such as Skype it is best to restart that software after FaceRig has finished installing otherwise the FaceRig Virtual Webcam will not show up in their webcam choice list. If you are unsure on how to do that, simply perform a system restart after FaceRig has finished installing. If you need help on getting Facerig to work with other programs or web services refer to the FaceRig support forums.

# 3. User Interface

Once the program is running, you will see the avatar, your own image in the lower left corner and two interface bars. The one on the top is the Utility bar, the one on the right is the Customization bar.

## 3.1. Utility bar

In the Utility bar you will find the following tabs: Toggle Hide Interface, Screenshot, Toggle Pic in Pic Mode, Toggle Broadcast, Toggle Face Tracking, Reset Face Tracker, Toggle Lipsync, Play Performance, Record Performance, Export performance as movie, Load Video as Input Source.

### 3.1.1. Toggle Hide Interface

Hides the interface. To access the interface again hover with the mouse over the top or right part of the screen. In order to make the interface stay always on just press the Toggle Hide Interface button again.

### 3.1.2. Screenshot

Takes a screenshot of the FaceRig window. The screenshots will be saved by default in Documents\Holotech\FaceRig\Screenshots. To change where screenshots are saved, go to General Options and choose the new path you wish your screenshots to be saved to by clicking Browse and selecting the desired path.

### 3.1.3. Toggle Pic in Pic Mode

Toggles between showing only the avatar, only the user or both the avatar and what is recorded on the webcam. This last mode is the default when starting up the program for the first time.

### 3.1.4. Toggle Broadcast

When selected it will let FaceRig broadcast via Skype, Twitch, etc. If it's turned off, then FaceRig will only show a message "FaceRig Application is Offline" in Skype, Twitch, etc. The same message is shown if FaceRig is entirely turned off.

### 3.1.5. Toggle Face Tracking

Turns on or off the face tracking. This is especially useful when you are customizing the avatar or want to take snapshots with the avatar in certain positions.

### 3.1.6. Reset Face Tracker

This button will only be present when Facial Tracking is toggled on. It resets the tracker values. If it's used, you will have to keep a neutral face during the initialization phase of the tracker (the different tracker phases are marked on the left side of the screen). It's recommended to use the Reset Face Tracker button if the initialization was done wrong or the avatar starts behaving erratic.

### 3.1.7. Toggle Lipsync

Turns on or off the sound-based Lipsync module. A quality headset with a good noise cancelling microphone is recommended for optimal lipsync, as any background noise may interfere with its accuracy.

### 3.1.8. Play Performance

If you have a recorded performance that you want to see how it looks on different avatars, you can simply load it here and the avatar will follow the previously recorded pattern, instead of what is shown on the camera.

### 3.1.9. Record Performance

This option allows you to record a performance in a special file format that can be used as input in FaceRig. This can be used to record different actions and then just test how they look on different avatars by using the Load Performance option.

### 3.1.10. Export performance as movie

This button lets you export movie from a performance file (\*.rpl) . To do so, select the desired Resolution, Frame Rate, Video Quality, Bitrate Type, whether you wish for the export to done frame by frame (this will save a \*.bmp file for each of the video frames) and Browse to select the \*.rpl file you wish to export from. Then click Export!

### 3.1.11. Load Video as Input Source

This option allows you to load a video as input source. This way FaceRig will track the movements shown on the prerecorded video, temporarily replacing your webcam device as input source. Just browse your folders to find the video file you wish to load.

## 3.2. Customization Interface

In the Customization Interface you will find the following tabs: Avatars, Environments, Pose Avatars, Advanced Tracking Configuration, Karaoke Panel, Voice Effects, General Options, Help.

### 3.2.1. Avatars

This menu lets you select your avatar, customize it and add props to it. First, select the avatar you wish to use by clicking on its thumbnail and clicking Load Avatar. If you wish to customize your avatar, go to the Customization tab (right next to the Avatar Gallery tab.) In the Colors subtab, you can select the colors you want for each of the avatar features (eyes, skin, fur, other body parts etc.) Proceeding to the Features subtab will allow you to scale body parts to make them smaller or bigger.

Note that at any time during your customization process you can click the Reset to Defaults button if you wish to start over.

#### ***Avatar Customization***

To customize the avatar's colors the first thing you need to do is choose the Custom skin from the Choose Avatar and Background menu.

After the Custom skin is selected, just go to the Customization tab and play around with different colors and features.

## I. Color

The Color tab allows you to change the colors on the avatar based on what masks are available. The masks dictate the fur, eye, clothes, etc color patterns. Everybody can make their custom masks and import them, but the custom skin also comes with a default mask.

Each avatar has different parts that can be customized, for example fur, skin, hair, accessories, etc. The easiest way to choose a color is by adjusting the slider and positioning the pointer on the color board; additionally, you can input the color code.

Once you get the avatar to look the way you want it to, you can save the template by using the Save Options button in the corner right part of the Color window. The template will be saved in a FaceRig specific format and can be loaded at any time by using the Load Options button that is placed on the left of the Save Options.

## II. Features

The Features tab allows you to change the physical features of the avatars. The option in this tab differ depending on the avatar.

The different features that can be changed from this tab are: ears, eyes, nose, head, mouth or eye pupil.

## III. Props

The Props tab allows you to customize the avatars by adding props. The Props can currently be placed either on the head or on the nose but they have placement options that allow for more customization.

To place a prop on an avatar just pick the position where you'd like to place it, select the bone you wish to attach it to, select the prop and tick the box that says Attach.

To customize the prop placement you have the following options under the Prop Skin drop down menu:

Scale: Scales the prop

Yaw: Rotates the prop around the yaw axis

Roll: Rotates the prop around the roll axis

Pitch: Rotates the prop around the pitch axis

Position X: Moves the prop on the X axis

Position Y: Moves the prop on the Y axis

Position Z: Moves the prop on the Z axis

To reset the changes just press the Reset to Default button.

To remove the prop, click Remove.

You can add multiple props.

## IV. Behavior Tab

Enable tongue - will enable tongue control, letting you use your mouse or keyboard to make your avatar stick out its tongue in various directions.

If you choose to control it via keyboard you can customize the keys that drive the different possible tongue movements (tongue out, tongue left, tongue right, tongue up, tongue down). You can do this in the Key bindings tab in General options> Preferences>Key Bindings.

The Enable Look At Camera option will keep your avatar's eyes pointed at the camera at all times, disabling eye pupil tracking and eye pupil puppeteering (posing.)

The Blink option is by default enabled as most users want the blinking to be tracked (that means the avatar will blink when they blink). If you want to stop the avatar from blinking when you blink, just un-check the Enable Blink box.

In addition to blink tracking, you can select Enable Auto Blink, so your avatar will automatically blink at certain intervals (to appear natural) even when not tracking your face.

### 3.2.2 Environments

In the Environments tab you will be able to choose the environment you want to use. Some environments are predefined for certain avatars(e.g. The Lava Pits work best with The Lava Baron).

**Gallery** - this is where you pick your background by selecting the thumbnail and double clicking or clicking Load.

**Customization** and **Postprocessing** are mainly aimed at advanced users, allowing them to adjust things like Lighting, Shadows, Ambient, Fog, Tonemapping, Bloom, Depth of Field and others.

*Control + Left Mouse Click will allow you to rotate the background, if the background being used at that time is a full 360 degree environment cube, not just a 2d backdrop.*

### 3.2.3. Pose avatar (previously known as puppeteering)

Only available while the tracking is off. While tracking is turned off, you can change the way your avatar looks on-screen with the sliders. This feature is more used for precise posing and if you want to test out certain looks on avatars, for example if you are making your own or just want to capture a screenshot in a particular pose.



### 3.2.4. Advanced Face Tracking Calibration

The Advanced Tracking Calibration menu is split into two parts: Body and Head Pose, Expression Units.

The Body and Head Pose options controls the default positioning of the body and head.

**Side to Side Rotation Options** – turns the avatar's head left or right.

**Up and Down Rotation Options** – turns the avatar's head up or down

**Tilt Options** – Tilts the avatar's head

**Body Up and Down** – Leans the avatar forward or backward.

**Body Tilt** – Tilts the avatar's body

**Auto Calibrate** – Auto adjusts the values so that no matter how you are sitting, the avatar is facing the camera.

The Expression Units are used to fine tune the tracking based on your appearance and/or preferences. For example, if you want your avatar to keep his eyes half closed, here's where you can adjust the values to get that result.

All expression units have a disable option so you can choose if you want the avatar to completely ignore certain actions (for example pursed lips).

Tracker Input Range shows the minimum and maximum values for different expressions. Min white bar means minimum value and has a certain action linked with it (e.g. closed mouth), Max white bar represents the maximum value and has the opposite action from the Max white bar linked to it (e.g. open mouth), and the black bar is the actual value that the tracker outputs based on the user's actions.

To adjust the interval just pull the sliders.

**Jaw Drop** - Specifies the interval between closed and opened mouth. When the black bar is over the “Min” white bar both the avatar's mouth and your mouth should be closed and when the black bar is over the Max white bar, the mouths of both you and the avatar should be open.

**Pursed Lips** – Sets the interval for pursed lips. When the black bar is over the Min white bar both you and the avatar should not have pursed lips and when the black bar is over the Max white bar, both you and the avatar should have pursed lips.

**Pursed Lips Left/Right** – Sets the interval for pursed lips direction. Min white bar corresponds to pursed lips towards the right and Max white bar corresponds to pursed lips towards the left. Pursed lips front (like a kiss) is automatically set as 66% of the pursed lips left/right interval.

**Opened Pursued Lips Left/Right** – Sets the interval for open mouth pursed lips direction. Min white bar corresponds to open mouth pursed lips towards the right and Max white bar corresponds to open mouth pursed lips towards the left. Open mouth pursed lips front (like a kiss) is automatically set as 66% of the open mouth pursed lips left/right interval.

**Corner Depressor** – Sets the interval for the mouth corners direction (happy->up and sad->down). If the black bar is closer to the Min white bar then the avatar will smile while if the black bar is closer to the Max white bar, the avatar's mouth corners will give him a sad expression.

**Lip Stretch Left** – Sets the interval for the min and max positions of the left mouth corner. When you are smiling, the value read by the tracker (the black bar) should be closer to the Max white bar (depending on how big the smile is, it might even go further to the right than the Max white bar specifies). When your mouth is in neutral position, the value read by the tracker (the black bar) should be either over the Min white bar or as close to it as possible.

**Lip Stretch Right** – Sets the interval for the min and max positions of the right mouth corner. When you are smiling, the value read by the tracker (the white bar) should be closer to the Max white bar (depending on how big the smile is, it might even go further to the right than the Max white bar specifies). When your mouth is in neutral position, the value read by the tracker (the white bar) should be either over the Min white bar or as close to it as possible.

**Upper Lip Raiser** – Sets the interval for the min and max values for raising the upper lip. When in default position, the value read by the tracker (the black bar) should be either on top of the Min white bar, or to the left of the Min white bar. When the upper lip is risen, the value read by the tracker (the black bar) should be closer to the Max white bar (if not on top of it, or more to the right, depending on how much your upper lip is risen).

**Lower Lip Drop** – Sets the interval for the min and max values for lowering the lower lip. When in default position, the value read by the tracker (the black bar) should be either on top of the Min white bar, or to the left of the Min white bar. When the lower lip is pulled down and the teeth are showing, the value read by the tracker (the black bar) should be closer to the Max white bar (if not on top of it, or more to the right, depending on how much your lower lip is pulled down).

**Nose Up/Down** - Sets the interval for the min and max values for raising and lowering the nose. When in neutral position, the value read by the tracker (the black bar) should be positioned in the middle between the Min white bar and the Max white bar. The Min white bar represents the value for which the nose will be completely lowered and the Max white bar represents the value for which the nose will be completely risen.

**Eyebrow Left Interior** – Sets the interval for the min and max values for raising and lowering the left interior eyebrow. When you look angry (therefore the left interior eyebrow is at its

lowest point), the tracker read value (the black bar) should be the same as for the Min white bar (so the black bar should be either on top of the Min white bar, or to the left of it). When you have a surprised expression (therefore the left interior eyebrow is at its highest point), the tracker read value (the black bar) should be the same as the one for the Max white bar (the black bar should be either on top of the Max white bar or a bit to the right of it).

**eyebrow Right Interior** – Sets the interval for the min and max values for raising and lowering the right interior eyebrow. When you look angry (therefore the right interior eyebrow is at its lowest point), the tracker read value (the black bar) should be the same as for the Min white bar (so the black bar should be either on top of the Min white bar, or to the left of it). When you have a surprised expression (therefore the right interior eyebrow is at its highest point), the tracker read value (the black bar) should be the same as the one for the Max white bar (the black bar should be either on top of the Max white bar or a bit to the right of it).

**eyebrow Left Exterior** - Sets the interval for the min and max values for raising and lowering the left exterior eyebrow. When you look angry (therefore the left exterior eyebrow is at its lowest point), the tracker read value (the black bar) should be the same as for the Min white bar (so the black bar should be either on top of the Min white bar, or to the left of it). When you have a surprised expression (therefore the left exterior eyebrow is at its highest point), the tracker read value (the black bar) should be the same as the one for the Max white bar (the black bar should be either on top of the Max white bar or a bit to the right of it).

**eyebrow Right Exterior** - Sets the interval for the min and max values for raising and lowering the right exterior eyebrow. When you look angry (therefore the right exterior eyebrow is at its lowest point), the tracker read value (the black bar) should be the same as for the Min white bar (so the black bar should be either on top of the Min white bar, or to the left of it). When you have a surprised expression (therefore the right exterior eyebrow is at its highest point), the tracker read value (the black bar) should be the same as the one for the Max white bar (the black bar should be either on top of the Max white bar or a bit to the right of it).

**Eye Left Pos Left/Right** – Sets the positioning interval for the left eye iris. When you are looking directly at the screen, the tracker read value (the black bar) should be in the middle of the interval determined by the Min and Max white bars. When you are looking to the left, the black bar should be either on top of the Min white bar, or a bit to the left of it. When you are looking to the right, the black bar should be either on top of the Max white bar or a bit to the right of it.

**Eye Right Pos Left/Right** – Sets the positioning interval for the right eye iris. When you are looking directly at the screen, the tracker read value (the black bar) should be in the middle of the interval determined by the Min and Max white bars. When you are looking to the left, the black bar should be either on top of the Min white bar, or a bit to the left of it. When you are looking to the right, the black bar should be either on top of the Max white bar or a bit to the right of it.

**Eye Left Pos Up/Down** – Sets the positioning interval for the left eye iris. When you are looking directly at the screen, the tracker read value (the black bar) should be in the middle of the interval determined by the Min and Max white bars. When you are looking up, the black bar should be either on top of the Min white bar, or a bit to the left of it. When you are looking down, the black bar should be either on top of the Max white bar or a bit to the right of it.

**Eye Right Pos Up/Down** – Sets the positioning interval for the right eye iris. When you are looking directly at the screen, the tracker read value (the black bar) should be in the middle of the interval determined by the Min and Max white bars. When you are looking up, the black bar should be either on top of the Min white bar, or a bit to the left of it. When you are looking down, the black bar should be either on top of the Max white bar or a bit to the right of it.

**Eye Left Closed** – Sets how opened or closed the left eye is. The Min white bar means the eye is opened and the Max white bar means the eye is closed. The interval should be decided depending on your preferences.

**Eye Right Closed** – Sets how opened or closed the right eye is. The Min white bar means the eye is opened and the Max white bar means the eye is closed. The interval should be decided depending on your preferences.

### 3.2.5. Karaoke Panel

Press the + sign to add a song to the playlist.

Toggle Repeat and Shuffle ON or OFF, depending on preferences.

Press Play/Pause, Backward, Forward to navigate songs.

The triangle sign will hide the playlist, leaving only the upper side of the panel visible. Clicking the triangle once more will make the playlist appear again.

Supported file formats - \*.mid, \*.kar, \*.avi

### 3.2.6. Voice Effects

Here's where you can choose to use sound effects to alter your voice. You can choose to use either the pitch shifter (adjusting the pitch using the slider) or use a robot voice, adjusting its frequency using the slider. Both/either can be reset to their default values using the Reset buttons.

### 3.2.7. General Options

I. Preferences

#### General

Hide logo - toggle the FaceRig logo ON/OFF

Autosave - toggle autosave for avatars settings ON/OFF

Use LipSync On KeyPress - toggle Lipsync on keypress ON/OFF. When on, pressing H will enable lipsync. Enabling this will disable the ability to manually activate lipsync.

Enable Hooked Keys - toggle hooked keys ON/OFF to be able to send the shortcut keys to FaceRig while focusing a different window.

Swap Stream Colors - toggle ON/OFF if you are having issues with weird color distortion on your webcam feed.

You have the ability to select where your Screenshots will be saved.

You can flip the video from the output of the FaceRig Virtual Cam.

### **Parental controls**

This tab lets you enable Parental controls. Enter the passcode, set the rating and toggle it ON/OFF, then press Apply.

### **Keybindings**

This tab lets you assign shortcut keys to various features/actions.

## II. Devices

Here is where you can change the device where FaceRig gets its video feed from (your webcam in most cases), adjust the source feed resolution. This is also where you select your microphone or whatever else device you want FaceRig to “hear” as a recording (input sound) device and where the sound output goes to. Usually users prefer to have the Audio Playback Device to their speakers/headphones, but this can also be set to the VB Audio virtual cable, so that any sound modifications made by FaceRig can be picked up by other software.

## III. Graphics

This tab allows you to change the resolution of the FaceRig window and adjust the Shadow Map Resolution (lowering them might result in better performance on lower spec machines)

Don't forget to click Apply after making your changes :)

## IV. Sounds

To achieve perfect sync between the lipsync (lip movements and actual sound, you should adjust the delay)

The Silence Threshold (Noise Gate threshold) needs to be adjusted based on how much and loud the background noise is in the room where FaceRig will be used. The closer it is to the left side, the more background sounds it will catch and therefore the lipsync will be buggy, but it can't be too much to the right side either as then it might not clearly hear what you are saying. One way to adjust this is by using Auto Calibrate.

Enabling Sound Loopback will let you hear the sound from your microphone or the modified sound if you're using Voice Effects.

When using this option be mindful of the audio feedback phenomenon. To avoid it start with a very low microphone volume and a very low speaker volume (also a head-set with a noise cancelling microphone may be preferable to speakers when using FaceRig). Allows the user to hear what the microphone is recording (the actual input for the program). This will help you figure out what environment sounds interfere with the lipsync and how well your voice is actually heard.

## V. Performance

This tab allows you to set a frame cap for various FaceRig elements. This feature is aimed mainly at users with lower spec computers, allowing them to adjust performance of the FaceRig process; changes can be toggled on/off.

### 3.2.8. Help (FaceRig Tutorial)

This button will display the Tips and Tricks panel.

## 3.3. Tracker information

The three icons on the left side of the screen are indicators on how well the tracker is working and how much of the expressions are driven by the tracking and how much by lipsync. Their purposes are as follows:

Tracker: Has multiple statuses:

- OK – means the tracking is working normally
- Recover – resets the data to the default values
- Init – Initializes the tracking data with the values it reads.

This is the stage where you need to keep a neutral pose otherwise the tracker will calibrate poorly.

Tracker confidence: How well the tracker recognizes your current pose. If the bar is green then it recognizes the pose very well, if it turns orange or red, then it might not recognize the pose very well which will in turn lead to tracking errors (for example if you turn your head at an angle that doesn't allow the entire face to be visible)

**Lipsync versus Tracker:** The green line shows whether the lipsync or the tracker has more influence over the expressions. If the green line is more to the right, then the tracker influences the expressions more, if the green line is more to the left, then the lipsync influences the expressions more.

## 4. How to use with Skype

In order to use FaceRig with Skype, you first need to have both programs opened and working. Some users have reported needing to have the broadcasting option in FaceRig turned OFF while setting it.

FaceRig creates a virtual camera that needs to be specified as input device in Skype. To change the camera in Skype go to Tools → Options... (or press Ctrl+, ) → General and in the Video Settings sub-menu → Select Webcam and choose FaceRig virtual cam. After you do that just save the changes and next time you'll have a video chat with your friends they'll see the FaceRig avatar instead of the actual user (if FaceRig is turned on). If the broadcasting isn't turned on yet, there will be a screen saying "FaceRig Application is Offline" until you start FaceRig and turn broadcasting on.

While streaming, it will show the same image you are seeing, minus the interface.

### **0. Glossary:**

**Reset to Default** – Resets all sliders to the initial values.

**Load Options** – Loads the customized avatars/backgrounds/expression units/etc

**Save Options** – Saves the customized avatars/backgrounds/expression units/etc option you just made in a specific FaceRig folder.

**Smoothing** – Smoothing determines how fast the actions happen. The minimum value (when the bar is in the left corner) means the actions happen very fast but the animations usually look choppy as there aren't any transitions between them (the transitions would make the reactions less responsive). The maximum value (when the bar is in the right corner) means the movement is very slow as there is a full, smooth transition to another state. The smoothing value depends on the actions taken, for example for blinking it's important to have fast actions and not so much a smooth transition, while for turning the head, the transition should be smoother so that the turning animation doesn't look like it skips a few frames.