

PPPen v2.13.0

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PPPen is an avatar pen gimmick system for VRChat SDK3 and automatic setup tool.

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How to Setup

※付属の画像を参考にしてください。

Step0: Importing unitypackage

Follow the usual procedure to import the latest PPPen unitypackage into your project.

Step1: Putting setup tool

Find “Assets/PPPen/PPPenSetup” and put it into Hierarchy; outside of avatar.

Don't put it into your avatar.

Step2: Configuring setup tool

Look at the Inspector of PPPenSetup you've put, and select your avatar to the “Avatar” slot.

If you want to customize any config, change that item.

Step3: Install

Press “Install / Repair” to install PPPen.

Step4: Adjusting the nib

Next, adjusting the nib position. Press the “Select” button.

Adjust the nib position to proper positioning of fingertips, etc.

***“Select” button sometimes doesn't work. Reset your unity layout or select “(Avatar)/PPPen/Main” manually.*

This completes the installation.

Step5: Changing or Repairing

If you want to change the configuration or when your PPPen has broken, just push “Install / Repair” to apply change and repair.

How to Customize

Supporting left handed

Set writing hand to [Ink Target](#) and picking up hand to [Pickup Target](#).

Don't forget to adjust the nib.

Use trigger to write like pens for worlds.

Set “Fist+Trigger” to [Gesture](#).

Then, you can write when you grab hand and pull the trigger.

Writing with a handheld pen, not with my fingertips.

Beforehand, put your pen model on your hand.

Add the pen to [Optional Object](#) and check the box.

The added pen and any object will be toggled with PPPen.

Reducing ExpressionParameters

Check [Color Control](#) and [Width Control](#), you need at least 3bit parameters.

Fetures

PP Pen Setup (Script)

Avatar

Pickup Target: lemon (VRCAvatarDescriptor)

Ink Target: Hand_R (Transform)

Custom Menu: ☐

WriteDefaults: ☒

Color

Default Color: [Color Picker]

Color Control: RGB+List

► Palette Colors

Width

Default Width:

Width Control: ☐

Particles

MaxParticles(poor=2500): 2500

Trail: ☒

Stabilizer: ☐

Gesture

Gesture Right:

Optional Objects

Object	isActiveWithPen
= None (Game Object)	☒

+ -

Parameter usage: 35 bits

27/128 bits parameters used

FilePath: Assets/PPPen_Files

► references

Install / Repair

Uninstall

Avatar

Avatar

Pickup Target: lemon (VRCAvatarDescriptor)

Ink Target: Hand_R (Transform)

Custom Menu: ☐

WriteDefaults: ☒

Avatar

Target avatar PPPen will be installed

Pickup Target

Reference position to pick up

Ink Target

Reference position the nib follows

Custom Menu

By default, PPPen is added to the top level ExpressionsMenu. If you want to add it in a submenu, use this option.

WriteDefaults

The value of WriteDefaults. the appropriate value will be selected when you select Avatar.

Color



Default Color

The default ink color

Color Control

Selects the mode used to change the ink color in the game. The number of parameters used differs depending on the mode.

- RGB+List: A free RGB color and preset 8 colors.

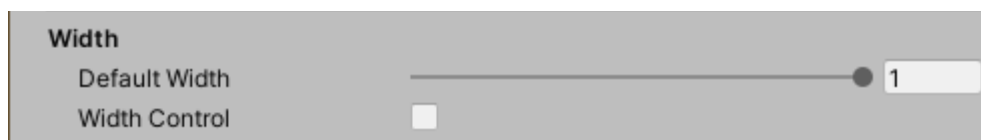
(parameter +32bit)

- RGB: Specify each RGB value from 0 to 100%. (parameter +24bit)
- List: Default and preset 8 colors: totally 9 colors. (parameter +8bit)
- Constant: Disable in-game color change. (parameter +0bit)

Palette Colors

RGB+List , Listモード時のパレットの内容を設定します。If you select RGB+List or List mode, set the contents of the palette.

Width



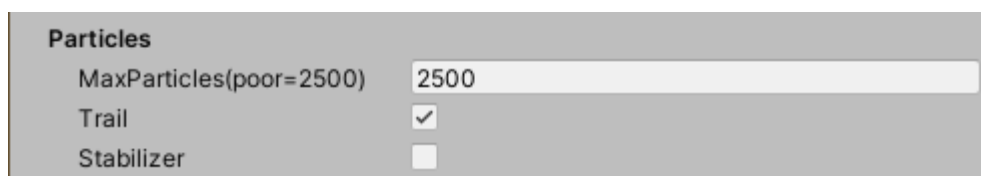
Default Width

The default line width

Width Control

If enabled, you can change the width in-game (parameter +8bit)

Particle



MaxParticles

The maximum particle count. While you are writing, particles are emitted 100 counts/s.

If the emitted particle counts over the limit, the older ones are destroyed to keep the limit.

To increase the time you are writing, increase this value, but your avatar rank must be Very Poor.

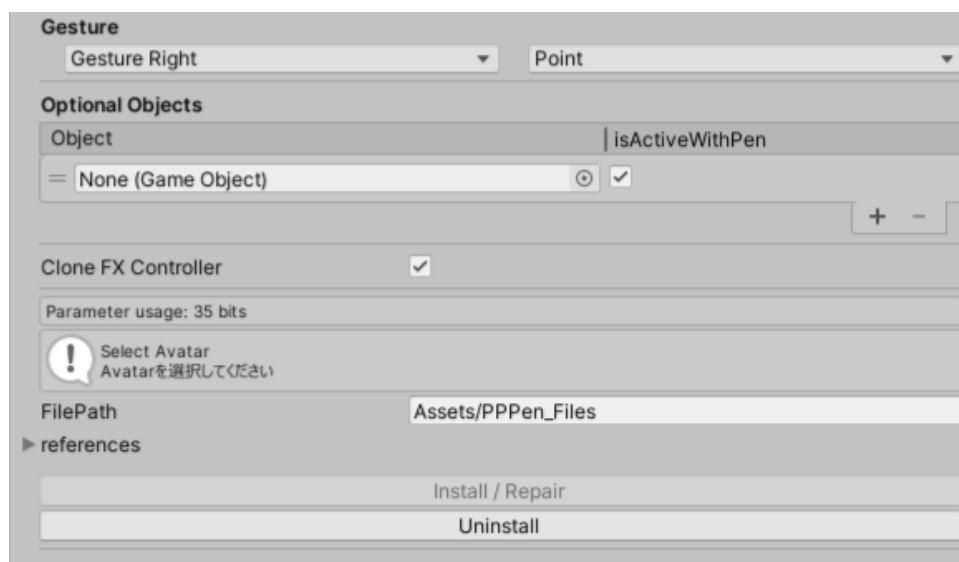
Trail

Smoothing between the particles by trail.

Stabilizer

Shake reduction(experimental)

Others



Gesture

Writing conditions. Select which hand sign is to be written with the left or right hand.

Optional Objects

When you toggle PPPen, any objects can be toggled on and off at the same time.

Object

isActiveWithPen

If on, the object is enabled when PPPen is active, disabled when PPPen is deactive.

If off, the object is disabled when PPPen is active; enabled when PPPen is deactive.

Clone FX Controller

For safety reasons, do not edit the controller for FX directly, but edit a duplicate one.

This does not work well with tools that directly change the FX controller, so try turning it off if you have trouble.

FilePath

Path for the autogenerated files are saved.

references

Don't change them.

Install / Repair

Install, apply configs and repair PPPen. You can re-push this after installing again.

Uninstall

Remove auto generated GameObjects, AnimatorControllerLayers,
ExpressionParameters and ExpressionsMenu.

FAQ

How long will the handwriting remain?

Unlimited: it will remain over 2700 hours unless you remove, over the [limit](#) or change or reset avatar.

However, late joiners can't see, so I recommend removing it in a brief time.

How many parameters are used?

Depending on the setting, 3 to 43 bits are used.

Quest compatible?

No.

How to update

If nothing special is mentioned, simply re-import and click the Install / Repair button.

I pressed "Install / Repair" and got an "ERROR" message.

This is an unexpected problem. Please contact me.

It doesn't work well when used with other tools. (ex.ComboGestureExpressions)

Some tools that edit FX controller directly cause problems.

Set off [Clone FX Controller](#) to prevent this problem.

My handwriting is shaking in the mirror/camera.

Only my handwriting shakes in the mirrors/camera. It is a VRChat's bug which is fixed at the beta-test release.

Don't worry: other people can see your handwriting is completely fixed.

There is an error and I can't push Install / Repair

Check the message and fix issues:

ExpressionsMenu is full

VRC avatar can have only 128 bits ExpressionParameters, and your configuration of PPPenSetup will over this limit.

Change configuration to reduce parameter use. See also [Reducing ExpressionParameters](#).

ExpressionParameters has reached capacity

ExpressionsMenu can have only 8 contents. Use submenu to prevent the limit. See also [Custom Menu](#).

Summary of term

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