How to set up the Colourset Editor for TT 3.0

Ok, this will be a guide under permanent construction to gather all the Info in one place. It may help you, my DMs are always open for help.

Written by me <u>→ LM Lao-Meo</u> my discord: <u>→ LM-Atelier</u>

Testing is still very difficult to be 100% accurate and easy so it will move slowly. I welcome every note and tip anyone can give me.

Credit me if you intend to use this guide on your website/discord!

I highly recommend finding out your settings and sharing them with others information and seeking out Vanilla items (only new DT ones since they are 100% set up for new materials). You can try copying rows from them or imitate what they did, it can help you learn to find your own way.

Textool itself has its own Basic Presets build that are perfect to use to build on.

I highly recommend using Penumbra for Finelazing your Material.

In my <u>previous guide</u>, I wrote how to make materials for clothes, so I won't go in-depth about this at all.

Now let's talk about how we set them up for different kinds of materials

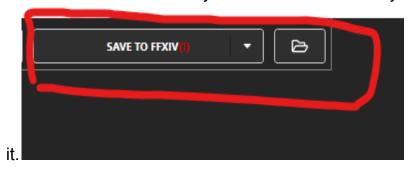
❖ A few Important Info regarding TT 3.0 where to click what ➤ How to Delete a material now

- ➤ Editing RGB/alpha channels in TT
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A few Important Info regarding TT 3.0 where to click what

The most important BUTTON for every change you do now in tt is "SAVE TO FFIV(!)"

the mini "(!)" always appears as soon you do anything like change/adding materials/models or even just a number in a row by colorset-editor get used to



I also got told that smart ppl use this

ctrl+s will do the same as hitting that button, if a transaction is open, it will save to the transaction.

Overall Smart people would use the new shortcuts... (so not me seeking hrs a delete button)

Also, get Used to clicking the Little Eyes with these eyes you "access" to different areas you want to see

- 1. Is for seeing the 3D Model Viewer and Importing the 3D Model
- 2. For your Material Setting
- 3. For your Maps, you want to import



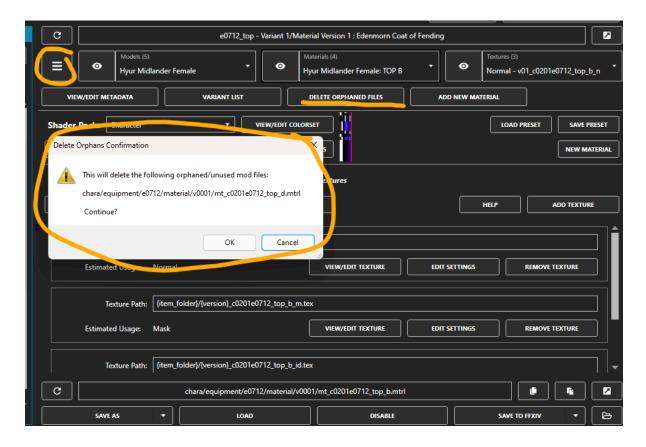
How to Delete a material now

There are two ways

Option 1 there are now fancy shortcuts to use.. **ctrl+d**, deletes WITHOUT asking, if you like to get rid of your material.

Option 2 as shown in the picture

- 1. click the three bars at the side
- 2. click "Delete Orphaned Files"
- 3. it will give you information, about which material is not used on your current model and will delete the whole material/s
- 4. Press enter, if you are Ok with it



Editing RGB/alpha channels in TT

One of the best and new addition is that we can simple change/add/edit channels without any external Program now.

there are for some materials simple things you want to quick test/edit but don't want to Open YET ANOTHER PROGRAM (yes i love the new TT)

(pics will follow later)

"Shaders" is a name you will hear probably often now

These so-called "shaders" are for the base set-up of your material. We do have a lot of them now. But how do we use them? for more in-depth read below.

CharacterLegacy

Once we convert an "Old" mod from before DT, it will be assigned the <u>CharacterLegacy</u> Shader, which imitates the old system and does not give us control over the new channels and options we can have now. (for modders from before DTt, it still works the same as back then.)

New "Character" -Shader

This is your New Main Shader!
We can set up cloth-realted things but also metal and glass/diamond.

New "CharacteGlass" Shader

This Shader as the name already gives can be used for glass, like diamonds or crystals and and and. But it comes with more Limits. Like it can't use the fake wind influence! For people who love details it is an important Info.

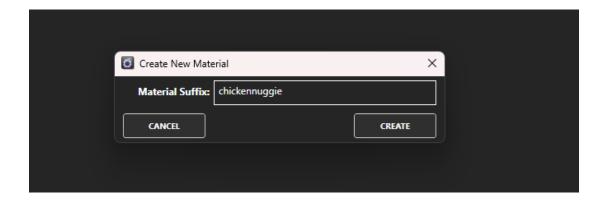
Ok, we got the shaders but what now?

Now we are starting to create our New Material, and for that, we need Textool 3.0, your 3 Model and your prepared maps/materials.

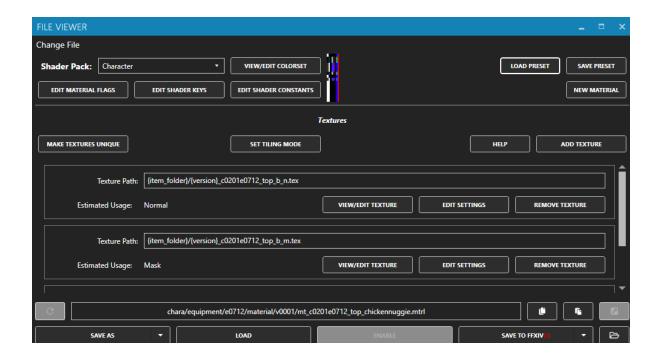
In which order you like to do it, like first material or first the 3d model is totally up to you and your own workflow, I will just write how I do this kind of thing.

Step 1. Create a new Material

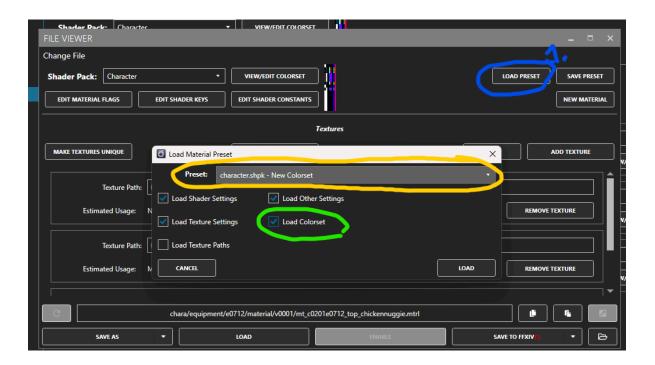
- I will create the base materials in TT.
- I open the Desired Item I like to use
- I click new Material, which opens a little mini window for how you want to name your new material, you can name it how you want even chickennuggie as long NO FANCY FONTS are used



- After you click create another window pops up here we will set down the base for your own needs.
- First, for the Shader Pack, we want to use "Character Shader "



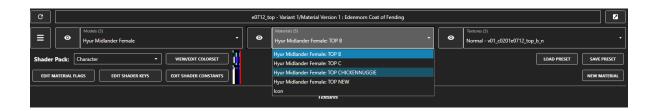
- We will Load up a Preset to have a simple base setting already in your color set and the material itself.
- Checkmark the "Load Colorset" so we have already a base setting for each row in the color set editor for the fresnel/sheen settings (more info below for fresnel/sheen)



I found out it is saver to ALWAYS click the button to "Make Texture Unique", before you load in your maps. Making texture Unique will always toss out your already imported material!

Ok now we are ready to load the preset in, and then the most IMPORTANT BUTTON for every change you do is "SAVE TO FFIV(!)"

Now we can close the File Viewer and Open on Top your newly created material.



Step 2. Importing the new Materials

We Open now your Area, where we can Import your prepared Maps, once you click the little eye the window will change its appearance.



Down on the window we will press "**LOAD**". It will open a texture folder on your pc, you will need to seek out the folder where you saved your materials and click ok, this we do for the Normal, the Mask and your Index map.

Important Note after each Import you will need to press the button "SAVE TO FFIV(!)".

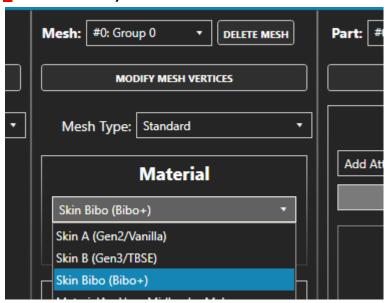
If you are too fast and you switch already to a new map, your window will have a "lag" and you will only see the map you tried to rush away from. Reopen the map you just imported in the viewer and then go back to your desired map will fix it.

Step 3 Import the model

We will move to the First window, press the little Eye and The 3D viewer will open. Now we go down to "LOAD" and import your 3D Model.

A new, very cool New Addition is there are already prepared material slots for your base bodies, it saves a lot of trouble.

Also Skin B (Gen3/TBSE) can also be used for HR3 as well!
You still need to add manuell the HR3 Fur! click material->
costume-> skin-> change on male normal path the last letter to for HR3 fur)



Ok, it is time for the Last and probably longest Part inside Textool.

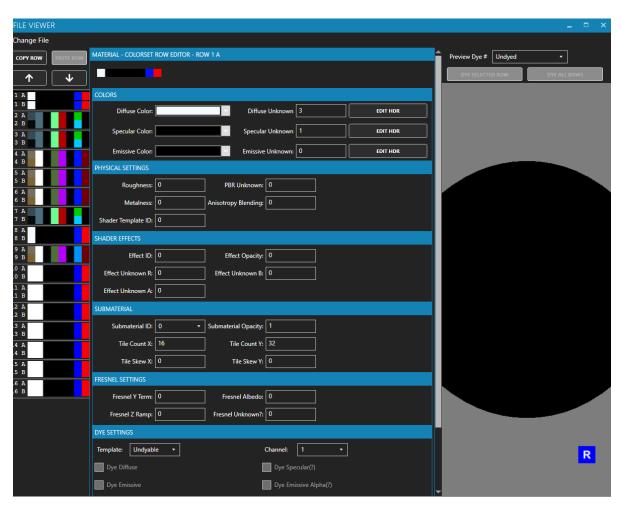
Step 4 Colorset

Ok, your model is in, we set up a new Material and everything is assigned Correctly!

We will Move now to another window, where we press the middle eye to go back to your Materials.

Then we seek out the button "VIEW/EDIT COLORSET" and click it, it pops up yet another window with your New Colorset editor.





Ok, we go now out from the Point you prepared your Index map to use row 1 A.

Make sure your saving click doesn't toss you back to row 1A if you are using other rows!

What are all those settings now

Keep in mind that "all together" is giving you a whole "How will it look". The Shader, Shader Settings, Shader Constant Settings, Material Flags, Texture maps and every row setting, are in need to be set up correct. One of the reasons we should start with a basic preset!

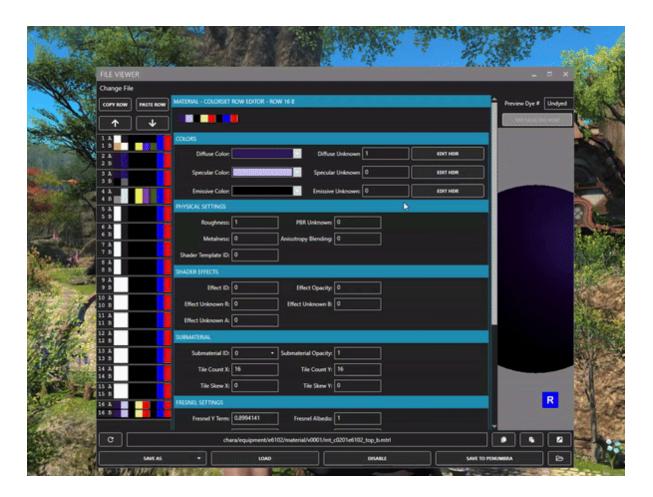
The Colors Section

(I don't know what all the unknown option doing yet totally, so far it feels the Unknow is like "power/strenght" the higher the number the more extreme it applies)



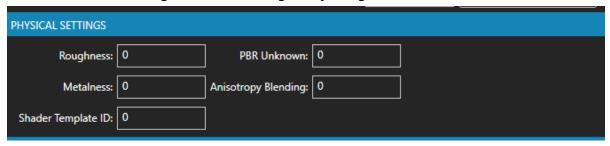
- ❖ Diffuse Color The Main Color of your Model, At the moment, I feel everything needs to be set brighter or to dark, on metal I use a very light color and on the cloth a very dark one to even gain a color.
- Specular Color The "glossy/reflection" sub color. I recommend keeping it at white first unless you know what you are doing. (A little example by glass you want the Diffuse color dark and the Specular color way lighter but not white)
- Emissive Color Mainly use pure black, unless you want it to be glowy af then you go to a very light color.

When you feel your Cloth item is just Black/dark and during nighttime it is colourless, set Emissive Unknown to 1. (you can also start by 0.1 and climb up, I Dont recommend it by metal since it will throw away the gloss)



The Physical Settings

some of these settings did not change anything for me...

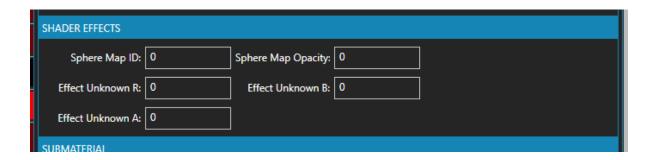


Roughness - it gives your material an overall more "rough/matte" look, good for cloth items. You can start by 0.1 and go higher as much as you need/want. 3 as an example gives you the look of Velvet material. I personally found 0.5 or 1 for a normal shirt that looks pretty enough already and doesn't look totally glossy.

- Metalness as the name already says yes this is where we set up metal effect to your material, for something like real metal you can go here for 1 (keep in mind if you don't add roughness to metal it 1 will be pitchblack in the nightlight)
- Shader Template ID Sometimes all is just black... and then we put her in a number 1 or 2 or 3 and suddenly the color appears how you wish. I'm not quite sure YET why. But also it can make some colors suddenly look flat.
- ❖ PBR Unknown- didn't change anything for me by testing yet
- Anisotropy Blending didn't change anything for me by testing It has something to do with how light will be reflected, for more in-depth google is your friend for now.

Shader effects

well now we playing



This option is a bit different Build

- Sphere Map ID: Creates a Light effect (setting this option to zero does not disable the effect)
- Sphere Map Opacity: how intense you want the effect to show, 0.1 is the starting number. It always needs to be turned on at least at 0.1 or else no effect will be seen. As Long it is not set to total 0 it is always creating an Effect!
- ❖ Effect Unknown R/B/A: Doing the same BUT they don't influence the whole material only some areas where the shadow would fall for example, I was able to type in higher numbers but the effect itself didn't change.

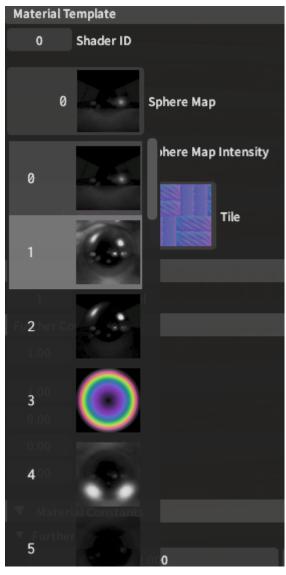
→ Effect Id Numbers

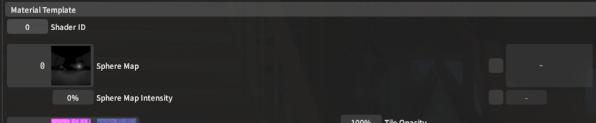
"I tested them all on the picture with Effect Opacity at 1 and made a static picture, keep in mind some of them with a lesser Effect Opacity can give a subtle glow/gloss. They also react with the ingame light so rotating and daytime are important factors in testing these options out." (Updated to Preview Penumbra)

I highly recommend to check it out in Penumbra Advanced Edeting, it has many "Previews" for most of the shader effects which is very helpful. You can set up how intense a glow is. As example it can be used to imitate glass/latex and leather effect "gloss/shine"

The Penumbra Setting is here very helpful since you can actual preview the base, under the drop down menu is a "how intense" you wnt to have the effect.

it is used in alot various settings as example it is used by eyes for gloss, you can imitate latex gloss/crystall/glass gloss with it .



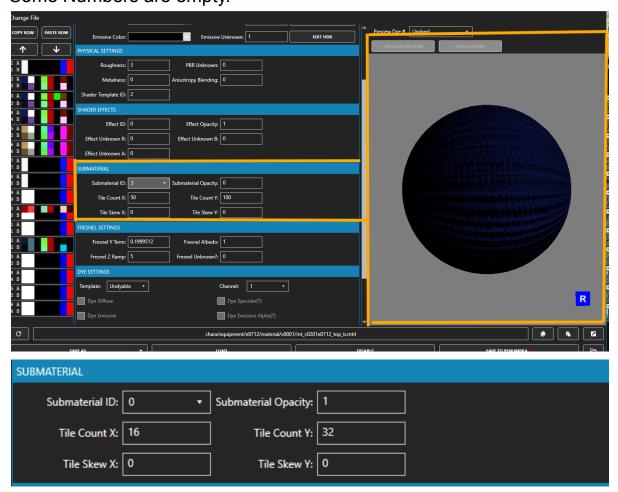


Submaterial

This is not a "new addition" we were able to use it before already. To put it simply, you can give a plain map details, like woven fabric or metal scratches and so on.

Scrolling through the numbers slowly and looking at the Site on the PBR ball for Preview can help you see what it is. (In Penumbra you are able to have a Preview picture of each number)

Some Numbers are empty.



- Submaterial ID: has a Drop Down menu Number 0 nothing happens. (when this is the last thing you clicked you can scroll with your mouse wheel trough it to change numbers)
- Submaterial Opacity: Needs to be turned "on" by having at least
 0.1 written to be active
- ❖ Tile Count X/Y: changes the size
- ❖ Tile Skew X/Y: changes the angle/rotation

How it looks in Penumbra, it has for almost all tiles a littel preview.



Sheen/Fresnel

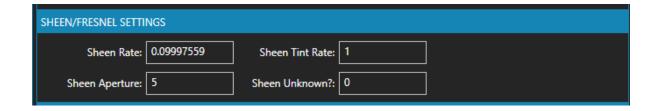
This setting can only be seen in what it does ingame.

Fresnel is the term used to describe how the light you see reflects at different intensities based off of the angle you are viewing it. For example, if you are standing over a pool looking straight down at the pool, you will not see a lot of reflections in the water.

To read what it does I recommend this link it does give a lot of insight.

<u>Shaders For Beginners Fresnel Factor</u>

<u>Using Fresnel in Your Materials</u>



To set it up.. that's why I did recommend loading in an already premade set-up because we need it ingame or else all is just a black blotch. I used so far almost all the settings the presets gave me and only played a bit with it yet

Fresnel Y Term: I keep it low as shown above

Fresnel Z Ramp: I'm testing it still out since the options we can combine are a lot. 2,5-5 are the best I found so far to go with Fresnel Albedo I do keep it either low like Y Term or at 1 Fresnel Unknown: haven't touched it a lot and haven't changed so far anything. it is maybe something like how intense will the effect be displayed

Inside Penumbra this setting is named minimal different and we are working with 0-100%, you will be able to see when you slide carefully the number high/lower.

I recommend to really test it yourself.

Penumbra Option -



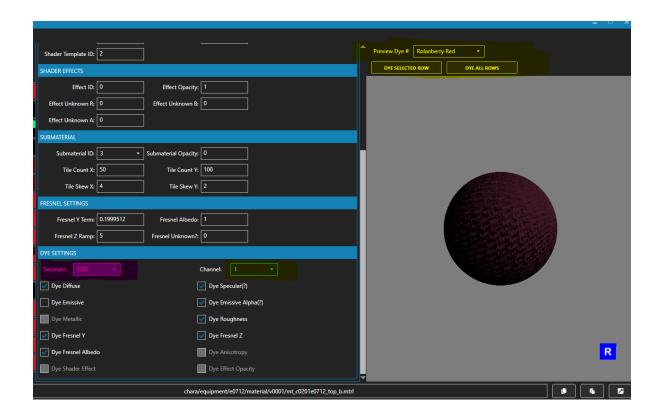
you can slide on it to test it as example to use it for velvet texture in higher numbers.

Dye Settings

Ok, it changed slightly.

This is now more "My recommendation" on how to test at first how color ingame affects your Item.

- Go to "Preview Dyey #" and seek out a good color you know ingame, like Dalamud Red or any other Lighter Color, do not test it with white/black or to dark colors!
- Click on the template to select first any number
- Check all the boxes I show in this Picture
- Now you can click on The template again and scroll slowly with your mouse through them to see how colour can be displayed ingame
- Keep in mind, It can look Ingame still very different, depending on HOW you set up all the other settings!



2 Channels Dye System

As you see in the picture Above There is Channel: with a drop-down menu with the number 1, by simply clicking on this and selecting Number 2 you can now use channel 2 of the dye system on this row.

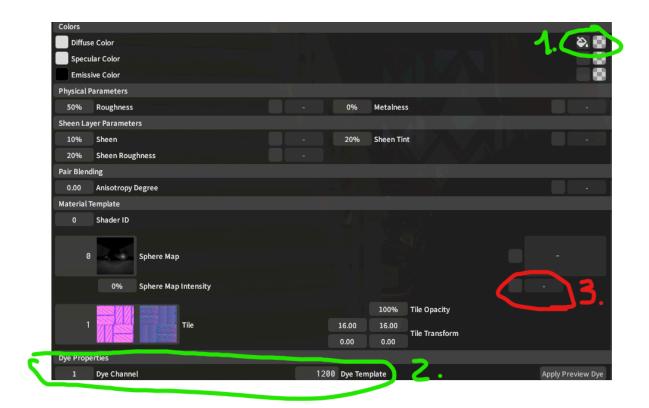
That's it.. 1 for channel One and 2 for channel Two

Setting up Dye in Penumbra:

In Penumbra it is minimally different, you will need, besides choosing Dye channel 1 or 2 and the Dye Preset Number, Always click a checkmark Box behind Diffuse or and wich effect you want to have use Dye too.

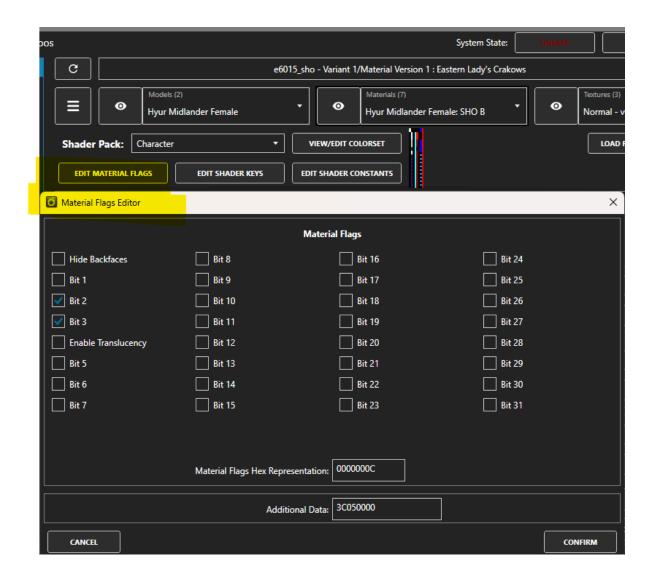
Keep in mind Enable Dye by Specular/Sheen settings can suddenly Ruin your whole set up!

To point 3 on the Picture as soon you "check" the littel dye window you cant undo it i dotn know why but unless you are 100% sure you need it dont use it.



Material Flags

Depending on the shader you are using like hair/skin/glass, here are things that can/or should be changed like Hide or show Backfaces and Enable Translucency (means enable transparent)

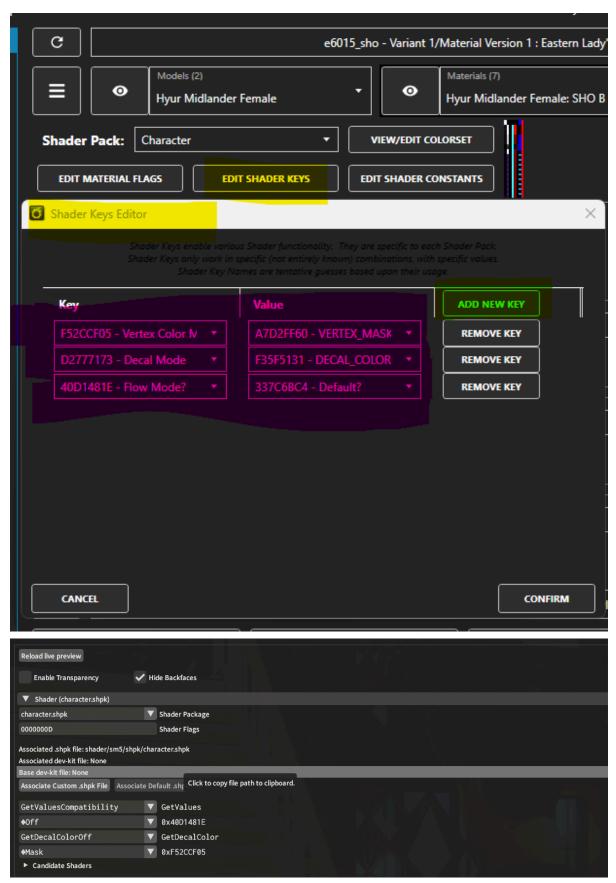


Shader Editor

This is one of the reasons why I highly recommend using a preset for your Materials.

It depends on what you are doing literally.

For example "Flow Mode?" can be used if you want to add fake wind influence, but for this, you will also need to prepare your mesh before in Blender.

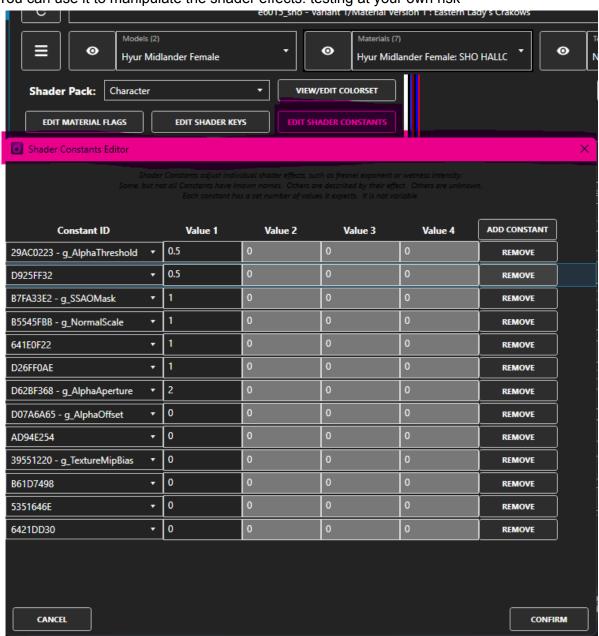


Penumbra counter Part

Shader Constants Editor

i will write to it more later, so far in short you can change Values with these of channels. Penumbra CounterPart is under Advanced Settings- Materials and then scroll down to Material Constants.

You can use it to manipulate the shader effects. testing at your own risk



Optional: Glass Shader for crystals

Glass shader was formerly best used for crystals, it changed how it behaves in DT i personally would recommend to use now the character shader.

Material we need

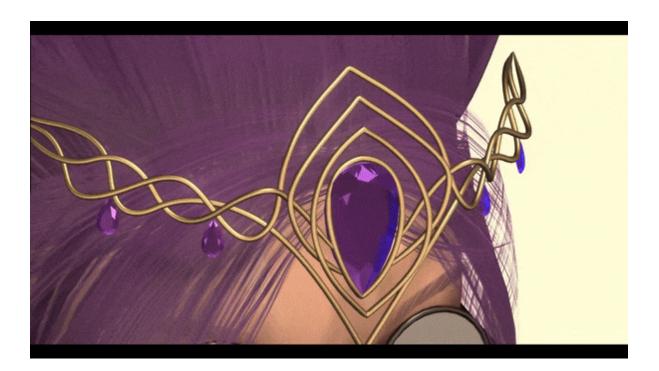
- 1. Normal map which has at least 60% Opacity (still testing if lower/higher makes a difference)
- 2. A Mask that looks like neon pink. (a point further down i wrote how to easily create this map yourself in a few seconds)
- 3. An Index map depends on how you want to set up the rows.
- ➤ We will create your New Material Use "CharacteGlass" as a shader Pack, for Loading up a preset I just choose characteglass.shpk
- ➤ We are checking that the material flag "Enable Translucency" is checked on.
- ➤ We are checking that "Show BackFaces" is turned off!
- ➤ We are importing your material
- ➤ We open the color set Editor
- > We are choosing on the Diffuse a "darker" color.
- ➤ For Specular we are choosing the Lighter Version of the same color you used, by your diffuse or a different one, to gain a reflection light play.
- > For example, Diffuse dark purple, specular color a very light purple, or an intensive dark purple and a light blue.
- ➤ Why is the Specular color lighter?
- Specular color is for how a reflection "shines", using two different/variation colors is just better.
- > But this is a personal choice!

For other settings, we will need now

Roughness: 0.5 Metalness: 0.5 Shader ID: 1

Shader Opacity: 2

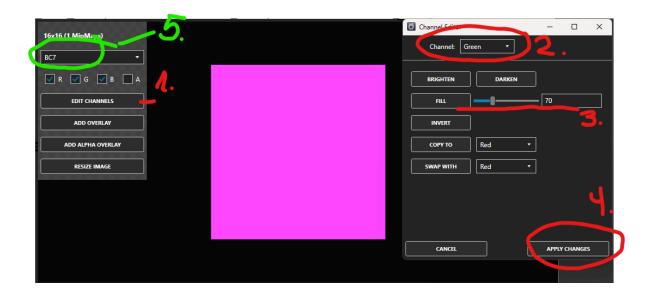
that's it, save it and check your Result. For this example in the gif, I used a full black-blue channel on the normal



How to make easy Metal

You can recreate them yourself in under 1 Minute! You don't need 1/2k big Maps, when your mesh has a plain UV. So you will have a small 16x16 map which is more than enough if you just want base material.

- After creating your material
- go to the material tab and seek out the mask
- Go on the left to edit channels button
- Select in the drop-down "green"
- Go to the middle slider and use "fill" around "70" of Grey.
- 0 is black and 255 is white
- Save it.
- Your mask should look more Pink but not Neoncolor.

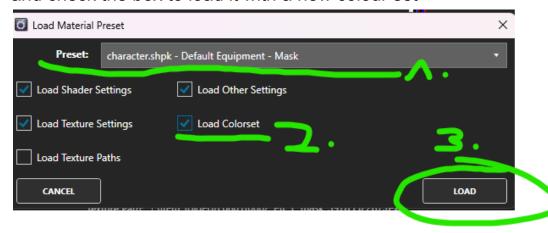


A few words to Metal and material

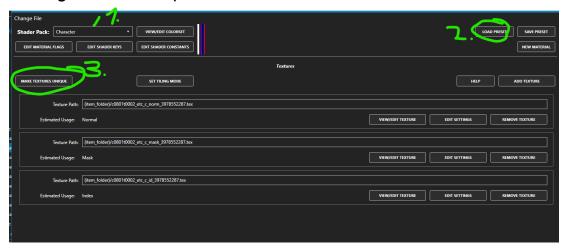
There are of course different ways to approach this, I found this way for myself at the start easier.

Please check how your metal looks during Day and Night Outside! If you feel your metal just turns almost black once night light comes, you will need to lighten up your Green channel on your mask! Metal needs roughness, and the Green channel in your mask is controlling it!

➤ We will create your New Material Use "Character" as a shader Pack, for Loading up a preset, I just choose character- mask.shpk and check the box to load it with a new colour set



➤ Making Texture Unique!



- Open the Material maps and seek the mask.
- ➤ We will edit the green Chanel. (see above)
- > We are saving your changes on the maps.
- ➤ We open the color set Editor
- We are choosing the Diffuse your Main colour
- ➤ You can choose the Specular colour, the Lighter Version of the same colour you used, by your diffuse or a different one, to gain a reflection light play.
- ➤ Why is the Specular colour lighter?
- > Specular color is for how a reflection "shines", using two different/variation colors is just better.

For other setting we will need now

Roughness: 0.1 up to 0.5 (test it a bit yourself for what you are going)

Metalness: 1

Fresnel Z Ramp: 5 Fresnel Y Term: 1 Fresnel Albedo: 1

that's it, save it and check your Result. (gif later)

Material with Base (Diffuse/picture)

Using a Diffuse, is now slightly different from setting up the base material.

Doing this with the new system gives the Control like roughness/metal or adding a Shader ID. We can also still use Colorset rows to influence certain parts if we set it up on the Index map.

On the "old" legacy system Diffusen always had a light gloss that wasn't able to be turned off sadly.

Material we need

- 1. Normal map
- 2. A Mask
- 3. An Index map depends on how you want to set up the rows.
- 4. Your Diffuse

There are two (2) options for doing this now.

Option 1

- Create a new material with Character.shpk
- Clicked "Make texture Unique "
- Adding a new texture path Copy the name above on one and changed the id/m/n part to - " base" did go on this path on the mini button to "edit settings" it opens a extra window on the "sampler" (it is a little drop down menu) i choose g_SampleDiffuse <-
- than by the slider underneath LoD Bias: Type 0.5 and confirmed it
- import on all maps so diffuse normal- mask and index map you still need a basic index mask since diffusen can still be dyed ingame
- if you just use a basic index row 16 A
- you need to go set diffuse color to white Diffsue Unknown to 1 and the Specular colour black Specular unknow 0 to emissive black and unknown 1
- you still can add roughness like 0.2 up to 1 or metal simply depends what you are trying to archive and nothing else you need to check that under fresnel all has a value written

Option 2

- create a new Material with Character.shpk
- Load a basic Preset > Character- Monster-Mask-Diffuse
- Checkmark load with Colorset
- Mark Texture Unique
- Save it
- Open the Material Tab and load in all maps you made/need
- Save and check it out ingame.