HOW TO READ

Filter evaluation:
OK – it works and it can be useful
RR – Read Review
MI – Minor Issues
SI – Some Issues
BRK - Broken
DMP – It should be DuMPed

Key frames utility:
NKI – Not Keyframable is an Issue
KNN – Keyframes Not Needed
KCU – Keyframes Could be useful but not indispensable

ALPHA MANIPULATION

• **Alpha gradient**: OK – It creates a gradient with control of shape and direction from the 0% to 100% of opacity
• **Alpha operation**: RR - where to input the alpha channel? If the clip has its own alpha channel you can just invert it
• **Alpha shapes**: MI - It's OK but the ellipse and the triangle shapes are not working
• **Chroma key**: SI – KNN - is working but it has just one parameter, it hasn't the blur for the border, it can't create just a mask and when you click on the selector it doesn't show the complete image so you can't select any color if you want to refine the selection unless you reduce the effect tolerance to 0. Then if you want to use more than one of it in the effect stack to create a sequence of garbage matte the second filter disable the first one and this is an issue
• **Color selection**: SI - it has more features but it's more sensitive. Not all the parameters work in an efficient way. Add more than one of it in the effect stack create the same issue we found in the chroma key filter, the second filter disable the first one.
• **Key spill mop up**: OK – KNN - it looks like it works but my test image has not a strong spill on it
• **Rectangular alpha mask**: DMP – NKI - has not key frames and it works same as the Alpha shapes filter with just the basic rectangular shape
• **Rotoscopying**: MI - it is working but when you switch to the normal view and then back to the editing, Kdenlive asks you to create a new mask from scratch but if you move to a previous created keyframe the mask shows again and you can go back to the keyframe you want to edit

ANALYSIS AND DATA

• **Audio wave**: DMP - the filter was intended for clips which have the audio embedded inside. So it's no more useful
• **Oscilloscope**: OK – KNN - it creates a super imposed oscilloscope to check image
• **RGB parade**: OKR – KNN - it creates the same visual output as the analog window
• **Timeout indicator**: DMP – It creates a very small vertical blue bar which shrinks or grows (it depends on the keyframes settings) on one side of the screen. I think it's totally unusable one time, one I was using it, Kdenlive crashed.
• **Vectorscope**: OK – KNN - it creates the same visual output as the analog window
• **Video values**: OK – KNN - it creates a box with RGB info superimposed on the timeline preview. Through the parameters you can move the analysis area where needed. I honestly don't know when to use it and if it could be useful
ARTISTIC

- **3 level threshold**: OK – KCU - by itself the filter just create a black an white image with 3 levels of threshold based on the high lights (represented as white), medium tones (represented as gray) and dark area (represented as black). This could be useful to understand the image composition (for eg: if you use levels or curves you can understand in which areas the different parameters works) or to combine with other filters to create different effects as glows, cutout or photocopy effect. The issue is that it cannot be configured. A way to change the area could be achieved by the use of, for eg, the level effect.

- **Binarize**: OK – KCU - This is the classic black and white threshold filter with incremental parameters

- **Binarize dynamically**: RR - KNN - This is the classic black and white threshold filter but it’s not configurable so I don’t think we need it because the Binarize do the same job but better

- **Burning TV**: RR - KNN - Simple effect who emulates a flame in the highest contrasted area of the clip. As there are no parameters to edit I don’t know how much could be useful but maybe mixed with other filters you can create some strange creative results.

- **Cartoon**: DMP – KNN - It creates a light solarization effect similar to a weak cutout. The parameters don’t work on the simplification of the colors layers and the “Difference space” control creates a rectangular area where the filter is apply or, if you move the values, a black box. The external area is turned to a bluish color because the filter, in my opinion, delete the RED channel.

- **Charcoal**: OK – KNN Very good filter with all the parameters to emulate draws and cartoon styles.

- **Dither**: OK – KCU - Creates a nice effect of dots like a printed page. Completely configurable.

- **Dust**: OK – KCU - Good effect to add dust and hair. Completely configurable.

- **Emboss**: OK – KNN - Classic emboss filter (depth mask like a sculpture) with all the parameters.

- **Grain**: OK – KNN -Basic Grain filter with a decent level of quality and enough parameters.

- **Old film**: OK – KNN - Good quality filter which creates configurable instability in lights and shaking footage. Base to create by mixing up with GRAIN, DUST, BLUR, and other effects a perfect emulation of a vintage film stock.

- **Posterize**: OK – KNN -Classic posterize filter with the incremental parameter

- **RGBnoise**: OK – KNN - Grain filter with color offset with a basic incremental parameter

- **Scratchlines**: OK – KNN - Good configurable Useful to be joined with OLD FILM and other all the other related emulator of vintage film stock

- **Sigmoidaltransfer**: OK – This filter allows you to turn the image in black and white and then to set the brightness and the contrast

- **Sobel**: OK – KNN - Classic Sobel effect which reveal the borders of the objects in the image by drawing them in the color on a black background

- **Threshold**: OK – Similar to a CUTOUT filter for color threshold (reduction of the number of colors in the image). It has one parameter only and this makes the filter a little bit too rigid but anyway usable.

- **Vignette**: OK – Simple vignette filter with 3 parameters for SIZE, SOFTNESS and SHAPE. This last parameter is based on a circle which can be totally round or close to an ellipse up to be totally dark.

- **Vignette Effect**: OK – More complex filter than the previous Vignette one. The 2 could be complementary. This second one is always round but you can move the center of the circle and change its opacity
BLUR AND HIDE

- **Auto Mask**: BRK – NKI - Could be useful if Keyframable. By now all the actions on the parameters don’t produce any effect. It just creates a pixellated area in the right lower part of the image.
- **Blur**: OK – Basic blur filter with switchable algorithm type and correction for the borders that otherwise erode.
- **Box blur**: OK – Square blur with vertical and horizontal parameters. It affects the borders of the image by eroding them.
- **Edge glow**: OK – KNN - It creates some sort of SOBEL effect with more parameters which allows to create different effects.
- **Glow**: OK – KNN - Basic Glow
- **Medians**: OK – KNN - Basic noise reduction filter
- **Obscure**: OK – NKI - It's a pixelate filter to obscure part of the image. It produces a rectangular area which you can set as size and position by input numbers. You have a real-time preview of the settings. The opacity slider actually sets the dimension of the pixel block.
- **Softglow**: OK – KNN - Light glow effect with all the parameters.
- **Square blur**: OK – Basic square blur with just one parameter related to the quantity of blurriness. It doesn’t affect the border of the image.

COLOR

- **B**: OK – KNN – Shows the original black and white image of the BLUE channel.
- **Chroma hold**: OK – KNN – Turn all the image to black and white except for the selected color. Some parameter more than just the tolerance (for eg: a second selection for the color range and soft borders, etc) could be useful.
- **Colorize**: OK – KCU – Complete colorize filter which turns the image to black and white and applies a color on it. Offered parameters are the Hue control to change the tonality of the color, the Saturation and the Lightness.
- **Contrast**: OK – Basic contrast control with just one parameter and Keyframable.
- **Equalizer**: RR – KNN – Fixed effect without any parameter. It applies a sort of LUT to the image creating a specific color and contrast effect which frequently creates bad artifacts.
- **G**: OK – KNN – Shows the original black and white image of the GREEN channel.
- **Greyscale**: OK – KNN – Same as the Greyscale filter but it turns the image to black and white based on the luminance approach. (By watching the 2 filters in a comparison I don’t see any difference. Probably also the Greyscale filter uses the luminance approach to turn the image to black and white).
- **Hue shift**: OK – Simple Hue slider to change color tonality. Keyframable.
- **Invert**: OK – KNN – Turns the image to its negative.
- **LumaLiftGainGamma**: BRK – KCU – The filter has the 3 classic parameters to control the brightness, the contrast and the gamma (mid values) of the image.
- **Luminance**: OK – KNN – Same as the Greyscale filter but it turns the image to back and white based on the luminance approach (By watching the 2 filters in a comparison I don’t see any difference. Probably also the Greyscale filter use the luminance approach to turn the image to black and white).
- **Primaries**: SI – KCU – A sort of cutout effect which reduce the number of color layers in the image. But
- **R**: OK – KNN – Shows the original black and white image of the RED channel.
- **Saturation**: OK – Basic color saturation filter.
- **Sepia**: OK – KCU – Actually, this is not a Sepia filter but mostly a Colorize which works on the UV components of the image.
- **Technicolor**: OK – KNN – Bi component parameter filter that emulates the logic of technicolor image process based on 2 channels with colors couples.
• Tint: OK – Turns the image to Black and White but you can input any color to replace the actual white and the actual back creating a Colorize effect base on 2 colors. You can input the colors couple and set the intensity of the effect

COLOUR CORRECTION
• 3 point balance: OK – Similar to Tint but with option to select 3 colors (Black, White and Grey). You can’t set the intensity.
• Apply LUT: OK – KNN – Allow you to load profile stored in LUT files.
• Brightness: OK – KCU – Basic brightness filter with a single parameter.
• Brightness (Keyframable): OK – Same as the filter above but Keyframable
• Bezier Curves: OK – KCU – Curve effect with bezier handles to edit the shape. The bezier approach to manipulate the curve is pretty uncommon but interesting and powerful. The lack of keyframes it’s an issue as let impossible the dynamic manipulation of the light. As it happens for the Curve and the Level effect to manage all the 4 channels you need to insert the filter more time in the stack. It could be great if we can fuse all the needed channel in just one filter
• CMYK adjust (avfilter): BRK – DMP - I can’t understand how the filter manage the RGB colors by emulating the CMYK approach as the filter don’t work at all.
• Curves: OK – KCU – Standard Curve effect The lack of keyframes it’s an issue as let impossible the dynamic manipulation of the light. As it happens for the Bezier Curve and the Level effect to manage all the 4 channels you need to insert the filter more time in the stack. It could be great if we can fuse all the needed channel in just one filter
• Levels: OK – KCU – Standard level effect The lack of keyframes it’s an issue as let impossible the dynamic manipulation of the light. As it happens for the Bezier Curve and the Curve effect to manage all the 4 channels you need to insert the filter more time in the stack. It could be great if we can fuse all the needed channel in just one filter
• Lift/gamma/gain: OK – KCU – Color corrector based on 3 color wheels and slider control of the light intensity for Lift, Gamma and Gain
• RGB adjustment: OK – Basic 3 ways mixer for RGB channels
• SOP/Sat: RR – If we read the Kdenlive’s guide on line we found this: https://userbase.kde.org/Kdenlive/Manual/Effects/Colour_Correction/SOP/Sat

By using this filter in the last version of the program I get a esachromatic image which could be edited to create some sort of cartoon effect. If I don’t mistake, when I tried it in the past, I remember that the behavior and the result was more similar to a color mixer
• White Balance: OK – White balance with color picker and Green tint correction
• White Balance (LMS space): OK – White balance with color picker and Color temperature tuner (In my opinion a lot more efficient than the previous one)

CROP AND TRANSFORM
• Crop, Scale and Tilt: MI – NKI - As soon you put it on the clip the preview screen turns to black. The preset value of the Tilt are set on the size of the image instead of half of the value. This place the origin point of the image at the latest pixel of both the vertical and horizontal axis. After the issue is corrected the filter works as is it supposed to.

As it is not a keyframable filter the opportunity to use it are severally reduced
• Edge Crop: MI – KCU – This crop filter put the result of the cropping operation at the center of the screen. It has 2 modalities: with or without automatic center crop. I wasn’t able to use the slider which control the center balance
• LetterBoxed: OK – Simple Letterbox effect with 2 black bars on top and bottom with configurable vertical distance parameter
• Position and Zoom: OK – Basic transformation keyframable effect to edit size and position with interactive preview.
• **Rotate (Keyframable):** OK – Rotate the image in a 3D space with position parameters
• **Rotate and Share:** OK – KCU - Rotate the image in a 3D space with position and size parameter. It has also an interactive preview to input the position
• **Transform:** OK – RR – Complete keyframable transform filter with Position, Scale, Rotation and Opacity. Automatic Alignment and Resize buttons. Toggle to rotate from the center and to allow distortions. Drop down menu for blending methods. 
   *The interactive preview miss the rotate control. Suggested as embedded filter*
• **nosync0r:** OK – KCU – Filter to modify the horizontal sync of the image. The base of the image can be moved vertically toward all the image. If keyframable could be used for some purpose more.

**DISTORT**
• **Corners:** OK – 3D perspective filter with interactive preview.
• **Defish:** OK – Corrector of the fisheye lens aberration. It has different algorithm, type of scaling, pixel aspect ratio.
• **Distort:** OK – Creator of keyframable distortion patterns.
• **Lens correction:** OK – MI - Corrector for lens barrel and pillow distortions. As soon you put it on the clip the preview screen turns to black. The preset value of the filter is 0.5 (500) for every value but the actual default is set to 1.0 (1000)
• **Mirror:** OK – Simple symmetrical mirror effect with vertical, horizontal, 2 directions diagonals and flip and flop feature. Maybe should be better to rename it “Flip Flop and Mirror” or create 2 different effects
• **Pixelize:** OK – Basic pixelizer for all the image with scale control of the block size both vertical and horizontal.
• **Wave:** BRK – I wasn’t able to produce any effect.

**ENHANCEMENT**
• **Denoiser:** OK – Spatial and temporal denoiser
• **Nikon D90 Stairstepping fix:** I tested on my footage bu I didn’t see any visible effect. Someone has to test it with some D90 footage.
   *In this video there is a demostration of the resuts:  [https://vimeo.com/1935644](https://vimeo.com/1935644)*
• **Sharpen:** OK – Very good Sharpen mask which can also reduce the amount of sharpen with an interesting soft effect
• **Spillsupress:** SI – DMP - Spill remover with no color selection and with 2 steps only. Even if the slider accept increments from 1 to 100 the effect has only two steps.

**FADE**
• **Fade from black:** OK – DMP – This is the same effect that we find in the effect stack after you move the clip handles for fading on the timeline. I guess that the handles should be the tools and that we can remove this redundancy.
• **Fade in:** OK – DMP – This is an AUDIO effect but it is in The VIDEO effects category. I guess this is due to the time when video and audio were embedded. This is the same effect that we find in the effect stack after you move the clip handles for fading on the timeline. I guess that the handles should be the tools and that we can remove this redundancy.
• **Fade out:** OK – DMP – Same as the filter above.
• **Fade to black:** OK – DMP – Same as “Fade from black”

**MOTION**
• **Freeze:** SI – I got some error during the export. The final clip presented a series of different problems depending on the export codec and compression.
   *The most frequent problem is the creation of one single white frame at position 2 (the
second frame of the clip after the begin of the effect)
One time the effect rendered a different frame than the one selected
Another time, it produced a clip with the first frame correctly created but the rest of the clip
presented a magnified part of the image with a pattern of color noise.