

# element

Guide for Nucoda and Phoenix  
2018.3

# Tangent Overview

The default layout attempts put the most commonly used functions and controls within easy reach of the user at all times. It is also designed to keep those controls available at all times, to minimise menu switching. These are persistent functions and controls.

Effects are referred to in the Element Mapper as a Mode - you will see that each mode is mapped separately in the mapper and the menus on some panels will change for every mode. The MF and Br-1 panels do not change when modes are switched, these are persistent menus. The Tk, Kb and Bt2 panels have menus that will move down in the bank order when modes are entered, wit the selected mode command at the top of the bank order.

The panels layouts are editable using the Tangent Mapper utility and multiple users are managed by changing the mapping setting in the Tangent Mapper. Changes to the mapper take immediate effect in the Nucoda or Phoenix application.

In the case where the Fake Key option is used in the Tangent Mapper, ensure that the mapped hotkeys are updated in the Mapper if they are changed in the Phoenix or Nucoda application, there is a list of Hotkeys that are mapped at the end of the document.

The default setup uses multiple banks for each panel. Move through different banks by pressing the (B) key on each panel the (A) button will still access the "Alternate" functions.

The difference between the "Alternate" function and the banks, is that switching to another bank will leave the panel display on that bank, while the "Alternate" function requires the user to hold the (A) button down and the make selections.

The only panel that deviates from the (A) and (B) behaviour is the Trackball Panel (Tk), on this panel, the (B) button will step forward through available tools on the current layer. Holding down (A) while pressing (B) will step backwards through the tools.

The numaric order for the tools can be changed in the TangentOrder.prefs file, in Root/Panel/Tangent. A value of zero will mean the tool is ignored. The trackball panel (Tk) and navigation panel (Mf) has dedicated Ball and Ring resets above the balls and rings.

## Available commands

Not all available actions in Nucoda and Phoenix are currently mapped, but most of the important functions are available for mapping. In the CC layer, the Matte and RGBM Curves tools are not currently mapped. All the DVO Tools have been mapped, for some of the complex tools not all parameters are mapped, especially where "Basic" settings are available.

This guide only shows the commands needed for general operation - the commands for the colour tools should match their GUI counterparts and will be mapped to Kb, Bt1 and Tk - using different banks.

## Installation of the Panels

Installation of the Element Panels is according to the instructions included with the panels. For use with Nucoda or Phoenix, be sure to select the Element Control Panel option in the installer..

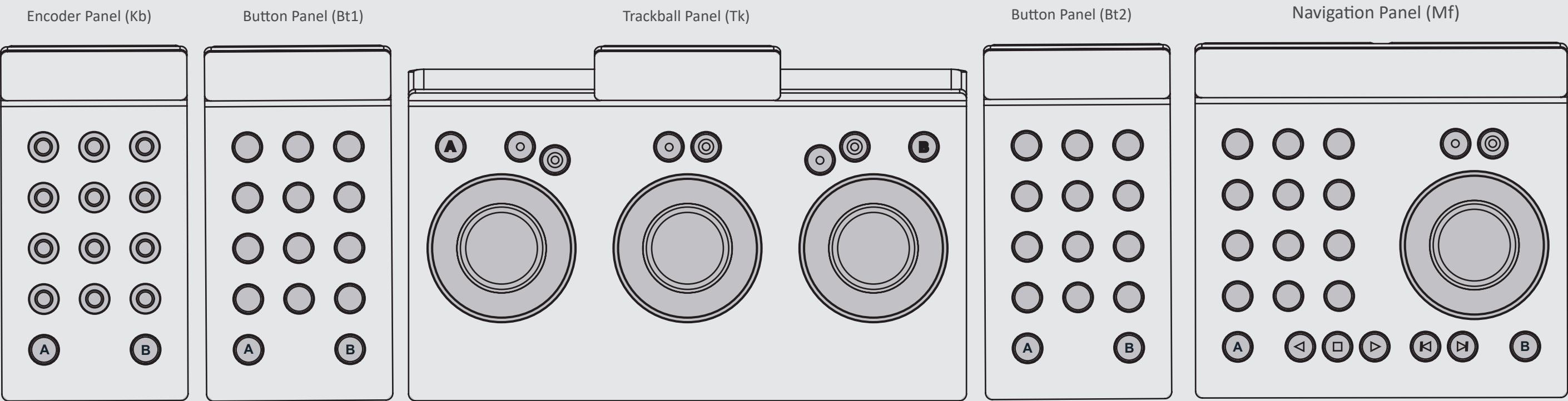
Once installed, please use the settings tab in the Mapper to select the option for each panel to switch it's own banks only.

## User Preferences

When new modes and commands are added they will available in the mapper, but not always mapped. The user will have the choice of mapping them manually to their existing modified layout, or choose to use the updated Defaults, which will of course ot have any custom preferences.

## Control Sensitivity

Except for menu selections and the ball and ring for moving shapes, all controls are set to obey the global sensitivity contronls in the Mapper. File/Control Map Settings... to change the sensitivity of Rings, Balls, Knobs and the Jog dial, please do this here. You can also set it per control if desired.



# Button Panel (Bt2)

These menus are persistent and will always be available

Bt2 - Bank 1 of 2

Compare	Mem Src	Comp Type
Src Sel -	Src Display	Src Sel +
Cue Event	BypassAll	Save Note
Loop	Recall	Append

Comparison - Memory Sources - Comparison Types  
Event Cue - Saving and Recalling notes

Bt2 - Bank 2 of 2 - Press B

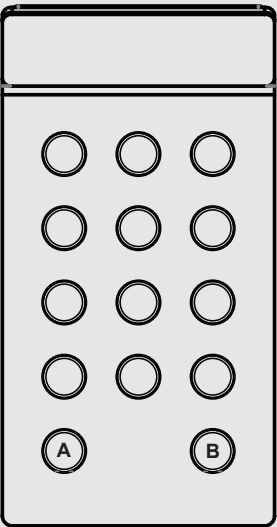
Add	1	5
Recall	2	6
Append	3	7
Delete	4	8

Quick memories - Select action on left - choose memory slot

Bt2 - Bank 1 of 1 - Hold A

->InputFX	->Base	->Master
Pan+Scan	Router	Shapes
Balance	BrightCon	BrightReg
Hue Curve	Keyer	Soft Clip

Quick Navigation between Base, Master and InputFX and Modes



Button Panel (Bt2)

# Navigation (Mf)

These menus are persistent and will always be available

Mf - Bank 1 of 2 - Available in all modes

Add CC	Add FX	Add To FX
<-Layer	Layer->	Del Layer
Mas Reset	Lyr Reset	FX Reset
Reset All	Undo	<-Shapes->

Layer navigation. Adding and removing layers.  
Resetting Layers and Effects. Undo. Shape select

Mf - Bank 2 of 2 - Press B

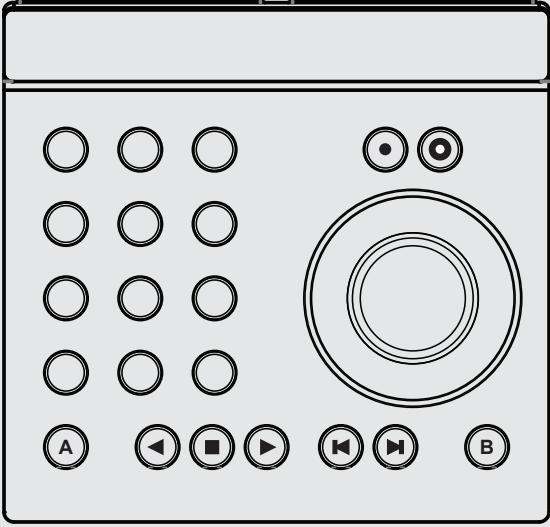
Add Dyn	Del Dyn	Fit
Add Cut	Del Cut	Zoom 1:1
Set Thumb	Exp Still	ShowK
Add IO	Library	Mems View

Timeline commands

Mf - Bank 1 of 1 - Hold A

Head A	Mark In	Mark Out
Head B	Cue Head	Loop
Head C	Mark Sel	Clear I/O
Head D	Clear In	Clear Out

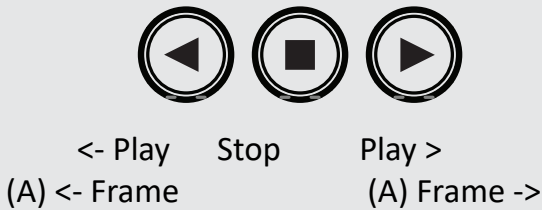
Playhead navigation - Marks



The wheel on the MF panel is mapped to Jog, the ball is mapped to move shapes in Xand Y

Information display:

Selected Playhead  
Rec Timecode  
In and Out Timecode  
Mode



# Button Panel (Bt1) Menu example

Mode specific menus, they will update depending on the mode

This example is the Shapes mode - Most modes use only one bank, but there are modes that use 2 or 3 banks. Use the (B) key on the panel to cycle through the banks to reach the pesistent menus for these panels. They will be moved to the back of the banks

Shape mode      Bt1 - Bank 1 of 2 - Mode specific

Ellipse	Rectangle	Auto-Bezr
Shape	Shp Inver	Delete
Vari Soft	Invert All	ShowK
<-Track	<-Reset->	Track->

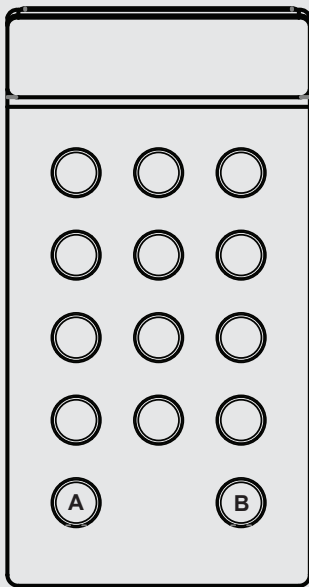
Access to relevant shape mode commands

Bt1 - Bank 2 of 2 - Press B - available in all modes

Autokey	Add KF	Del KF
<-KFrame	Shapes	KFrame ->
Balance	BrightReg	Hue Curve
Soft Clip	Router	Pan+Scan

In some modes this menu could move to Bank 3 or 4

This menu allows quick access to Autokey, a Adding Keyframes, shapes menu and trimming modes.



Button Panel (Bt-1)

# Knob Panel (Kn) Menu example

Mode specific menus, they will update depending on the mode

The encoders must be pressed down to reset the values. Sensitivity can be set in the Tangent mapper application.

Shape mode      Bt1 - Bank 1 of 2 - Mode specific

Out Soft	In Soft	Blur
Opacity	Shp Oper	Soft Fall
Comb Opty	Comb Oper	
Flexibilty	Tightness	TrackType

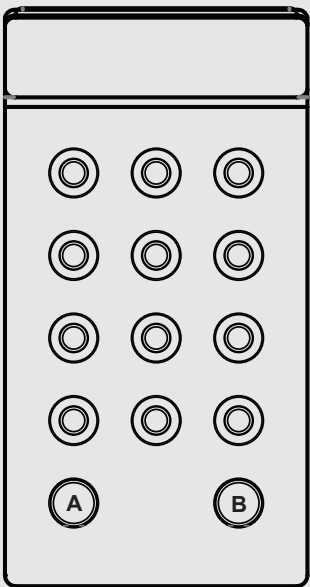
Access to relevant Shape mode menus

Bt1 - Bank 2 of 2 - Press B - available in all modes

PL Red	PL Green	PL Blue
Rot Wipe	Density	Alpha Out
Opacity	Src Input	BlendMode
Blur Size	Sat In	Sat Out

In some modes this menu could move to Bank 3 or 4

Sat In and Sat Out, and Printer Lights  
Layer blur, Layer Opacity, Inter layer blend modes



Encoder Panel (Kb)

# Trackballs and Rings - Tk

The trackballs and rings are automatically active when a relevant tool is selected.  
Their use is not only limited to colour tools.

In the shape tool, with a selected shape, they are mapped

Left Ball - Shape position  
Left Ring - Softness

Middle Ball - Scale X and Y  
Ring - Scale

Right Ball- Not mapped  
Right Ring - Rotate

In the Pan & Scan tool you can use the trackballs for positioning, rotation and scaling.

Left Ball - Pan and Tilt  
Left Ring - Scale image

Middle Ball - Scale X and Y  
Ring - Rotate

Right Ball- Softness X and Y  
Right Ring - Softness

Use the two reset keys to reset the ball and the ring.

Sensitivity can be set in the Tangent mapper application or each control they are not mapped to .global sensitivity.

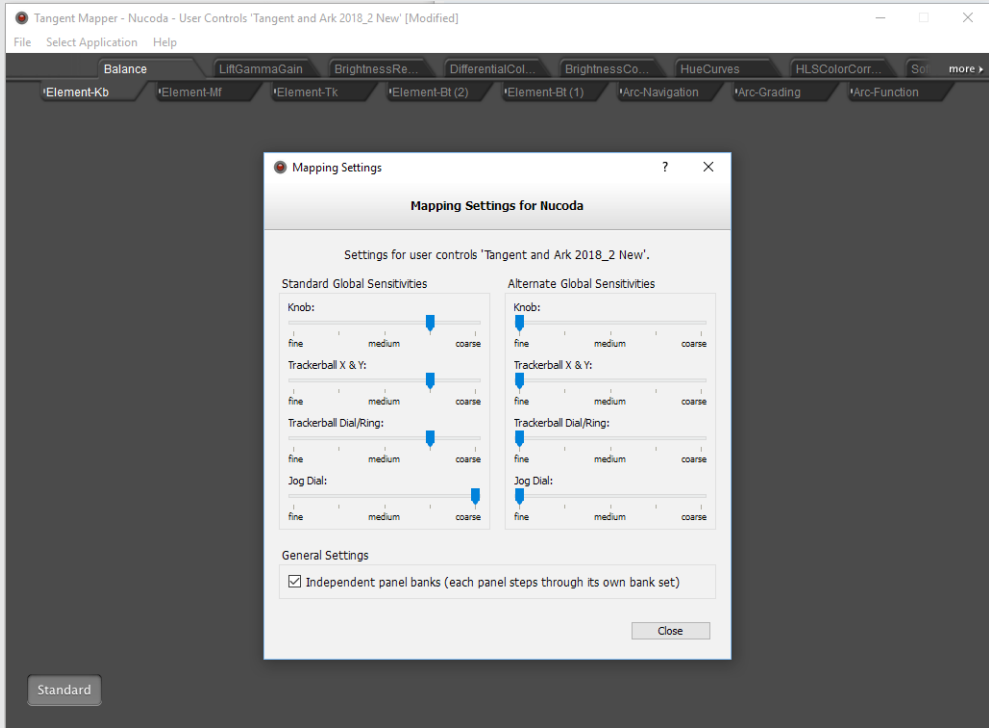
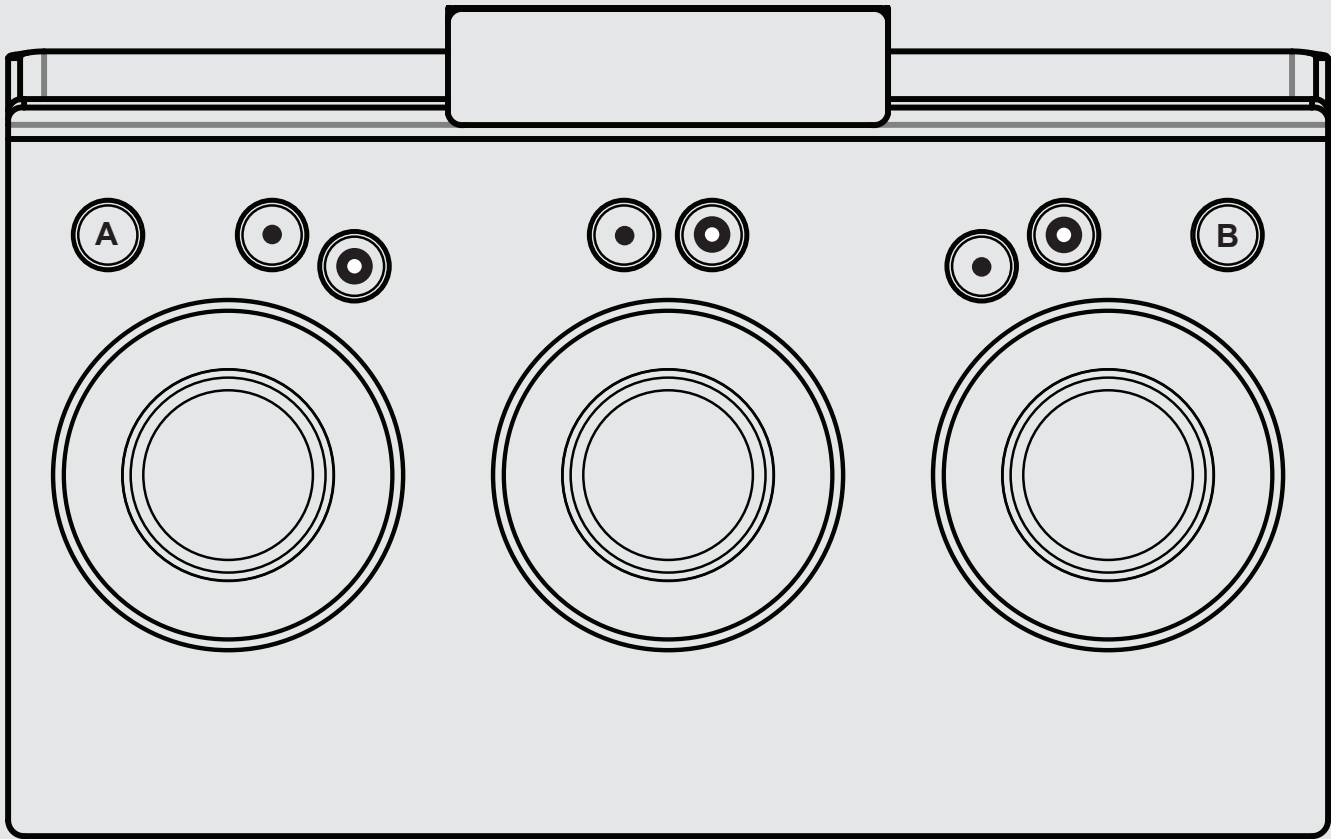
The following setting are available in the general.prefs file

C:\Nucoda\Root\Users\All Users\general.prefs

```
tangent
{
    trackballCoarseSpeed 50.000000
    trackballFineSpeed 10.000000
    trackRingCoarseSpeed 50.000000
    trackRingFineSpeed 10.000000
}
```

Changing these values will change the amount a colour control will change inside Nucoda when the ball or wheel is used.

The defaults wil change values by .002  
Changing the value from 50.000 to 100.0000 will cause the values to be changed by .004



Sensitivity settings in Tangent Mapper application



**Bt2 - Bank 1 of 2 - Available in all modes**

Compare	Mem Src	Comp Type
Src Sel -	Src Display	Src Sel +
Cue Edit	Bypass All	Save Note
Loop	Recall	Append

- Compare - Turns on compare mode
- Mem Src - Chooses the comparison source from Memories
- Comp Type - Selects between the available compare options
- Src Sel + and - Choose a mems source (event, track, note)
- Cue to - Cue to selected event in events view (yellow square)
- Bypass All - Bypass all effects or corrections on clip
- Save note - Save current corrections as a note
- Loop - Set playback mode for timeline playback
- Recall - Recall selected layers to current selected shot
- Append - Append selected presets to current note

**Bt2 - Bank 2 of 2 - Press B - available in all modes**

Add	1	5
Recall	2	6
Append	3	7
Delete	4	8

- Add - Press 1 to 8 to store the mem
- Recall - Press 1 to 8 to recall the Mem
- Append - Press 1 to 8 to append the Mem
- Delete - Press 1 to 8 to delete the Mem

**Bt-2 - Bank 1 of 1 - Hold A - available in all modes**

->InputFX	->Base	->Master
Pan+Scan	Router	Shapes
Balance	BrightCon	BrightReg
Hue Curve	Keyer	Soft Clip

- Navigate to the selected layer (Input FX, Base, Master)
- Navigate to the selected Mode.

**Mf - Bank 1 of 2 - Available in all modes**

Add CC	Add FX	Add To FX
<-Layer	Layer->	Del Layer
Mas Reset	Lyr Reset	FX Reset
Reset All	Undo	<-Shapes->

- Add CC - Add a new colour correction layer after the current layer
- Add FX - Add selected effect as user FX layer
- Add to FX - Add selected effect as input FX layer
- <-Layer-> and Layer-> Navigate between Colour and FX layers
- Del Layer - Delete current layer
- Mas Reset - Reset all layers on the current or selected shots
- Lyr Reset - Reset the current colour or fx layer
- FX Reset - Reset only the selected colour effect
- Reset All - Will reset all layers in shot, including Input FX Layers
- Undo
- <-Shapes-> Cycle vailable shapes in current layer

**Mf - Bank 2 of 2 - Press B - available in all modes**

Add Dyn	Del Dyn	Fit
Add Cut	Del Cut	Zoom 1:1
Set Thumb	Snapshot	ShowK
Add IO	Library	Mems

- Add Dyn - go to desired in pont and press - goto out point and press to create dynamic
- Del Dyn - position over dynamic and select to delete dynamic
- Fit - Scale to fit (Focus sensitive - for timeline and viewer image)
- Scale - Full size scale (Focus sensitive - for timeline and viewer image)
- Set Thumb - Select new image reference for event view
- Snapshot - Save still image of current frame (setup in preferences)
- ShowK - Show key image (use to see shape and keyer alpha)
- Add IO - Add new layer with inverted matte of previous layer
- Library - Mems - Switch between library and mems views

**Mf - Bank 1 of 1- Hold A - available in all modes**

Head A	Mark In	Mark Out
Head B	Cue Head	Loop
Head C	Mark Sel	Clear I/O
Head D	Clear In	Clear Out

- Select Head A B C D - press cue to move selected playhead to position of active head
- Mark In / Out to set In and Out points
- Mark Sel to set I/O points on current clip
- Loop to select playback mode
- Clear I/O to clear marks
- Clear in and Clear out



# Button Panel (Bt1) - Keyer Mode

The keyer the largest menu with 5 banks - each keyer type has it's own bank and you have to switch to the required bank manually

**Bt1 - Bank 1 of 2**

Enable	ShowK	Graphs On
Hue	Sat	Lightness
Red	Green	Blue
Hue	Sat	Value

Enable - Enable and diable the keyer - use the picker on the GUI to pick key  
ShowK - Show the Alpha channel for the slelcted  
Graphs On - Graph for I-Keyer  
Hue Sat Lightness - Enable or disable - remove the effect form key result  
Red Green Blue - Enable or disable - remove the effect form key result  
Hue Sat Value - Enable or disable - remove the effect form key result

**Bt1 - Bank 2 of 2 - Press B - available in all modes**

Autokey	Add KF	Del KF
<-KFrame	Shapes	KFrame ->
Balance	BrightReg	Hue Curve
Soft Clip	Router	Pan+Scan

**In some effect modes this menu could move to Bank 3 or 4**

Autokey - Turn on Autokey - keyframe is set on parameter change  
                  automatically turn off when mving to a new event  
Add KF - add keyframe  
Del KF - delete Keyframe at current position  
<- KF - previous keyframe  
Shapes - goto shapes mode in current layer  
KF-> - next keyframe  
Trim - Trim on - press again to cycle to segment and timeline modes  
Slip - slip mode  
Slide - slide mode  
SceneEdit - Select scene cuts on timeline and press to convert to cuts.  
Trim- Frame offset for trim/slip and slide  
Trim+ Frame offset for trim/slip and slide



# Knob Panel (Kn) - Keyer

## Kn - Bank 1 of 6 - Keyer main page

Keyer	FilterTyp	MedianSiz
	KInFilter	MedianStr
DespecSiz	Grow Mode	BlurMode
Despecle	Grow	Softness

Keyer - Pick keyer to use HLS, RGB, HSV or lkeyer  
FilterTyp - Filter type for the Pre-Key filter  
KInFilter - Key in filter value  
MedianStr - Media filter strength  
DespecSiz - Despecle filter Size  
Grow - Grow matte  
Softness - Soften matte

## Kn - Bank 2 of 6 - Press B - HLS Values

Hue High	Light Hi	Sat High
HHighSoft	LHighSoft	AHighSoft
HLowSoft	LLowSoft	SLowSoft
<-Hue->	<-Light->	<-Sat->

HueHigh / LightHi Sat / Hi - Adjust high value for Hue Lightness Sat  
HHighSoft / LHighSoft / AHighSoft - Adjust softness param for high values  
HLowSoft / LlowSoft / SlowSoft - Adjust softness param for low values  
<-Hue-> <Light-> <-Sat-> - Rotate values

## Kn - Bank 3 of 6 - Press B - RGB Values

Red High	Green Hi	Blue Hi
RHighSoft	GHighSoft	BHighSoft
RLowSoft	GLowSoft	BLow Soft
<-Red->	<-Green->	<-Blue->

Red High / Green Hi / Blue Hi - Adjust high values for Red Green and Blue  
RHighSoft / GHighSoft / BHighSoft - Adjust softness param for high values  
BLowSoft / BlowSoft / BlowSoft - Adjust softness param for low values  
<-Red-> <Green-> <-Blue-> - Rotate values

# Knob Panel (Kn) - Keyer

## Kn - Bank 4 of 6 - Press B - HSV Values

Hue High	Sat High	Val High
HHighSoft	SHighSoft	VHighSoft
HLowSoft	LLowSoft	SLowSoft
<-Hue->	<-Light->	<-Sat->

Hue High / Sat High / Val High - Adjust high value for Hue Sat Value  
HHighSoft / SHighSoft / VHighSoft - Adjust softness param for high values  
HLowSoft / SLowSoft / VlowSoft - Adjust softness param for low values  
<-Hue-> <-Sat-> <-Value-> - Rotate values

## Kn - Bank 4 of 6 - Press B - l-Keyer

Def Soft	Scale	GraphOpc
FilterTyp	MedianSiz	
KInFilter	MedianStr	

Def Soft - Default Softness  
Scale - Scale softness  
GraphOpc - Ovelay graph opacity  
FilterTyp - Filter type for the Pre-Key foilter  
MedianSiz - Media filter Size  
KInFilter - Key in filter value  
MedianStr - Media filter strength

## Kn - Bank 6 of 6 Press B - Default menu page

PL Red	PL Green	PL Blue
Rot Wipe	Density	Alpha Out
Opacity	Src Input	BlendMode
Blur Size	Sat In	Sat Out

Sat In and Sat Out, and Printer Lights  
Layer blur, Layer Opacity, Inter layer blend modes



Digital Vision World  
21 Poplar Business Park  
10 Prestons Road  
London  
E14 9RL

Tel +44 3330 148 148

[www.digitalvision.world](http://www.digitalvision.world)

Digital Vision Sweden Filial  
Sankt Eriksgatan 63A  
112 34  
Stockholm