

element^{3U}Tk^{2U}Mf^{1U}Kb^{1U}Bt

Nucoda
Colour Grading and Finishing



Phoenix
Automated & semi-automated
film and video restoration



Overview

There a 5 panels in the recommended setup.

- 1 Mf - Navigation Panel
- 2 Bt - 12 Button Panels (Named Bt1 and Bt2)
- 1 Kb -12 Knob Encoders
- 1 Tk - Trackball Panel.

In the doc, we refer to them as Mf, Bt -1 and 2 Kb and Tk

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. Persistent menus are available in all modes at all times.

The layout is editable using the Tangent Mapper utility and this is also how multiple user accounts are managed. 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 order in which the tools are stepped through can be changed in the TangentOrder.prefs file, in Root/Panel/Tangent.

The trackball panel (Tk) and navigation panel (Mf) has dedicated Ball and Ring resets above the balls and rings. There a 5 panels in the recommended setup.

The default setup uses multiple banks for each panel. Move through different banks by pressing the (B) key on each.

Mapped effects

Currently not all the effects available in Nucoda and Phoenix are mapped:

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.

Installation

Installation of the Element Panels is according to the instructions included with the panels.

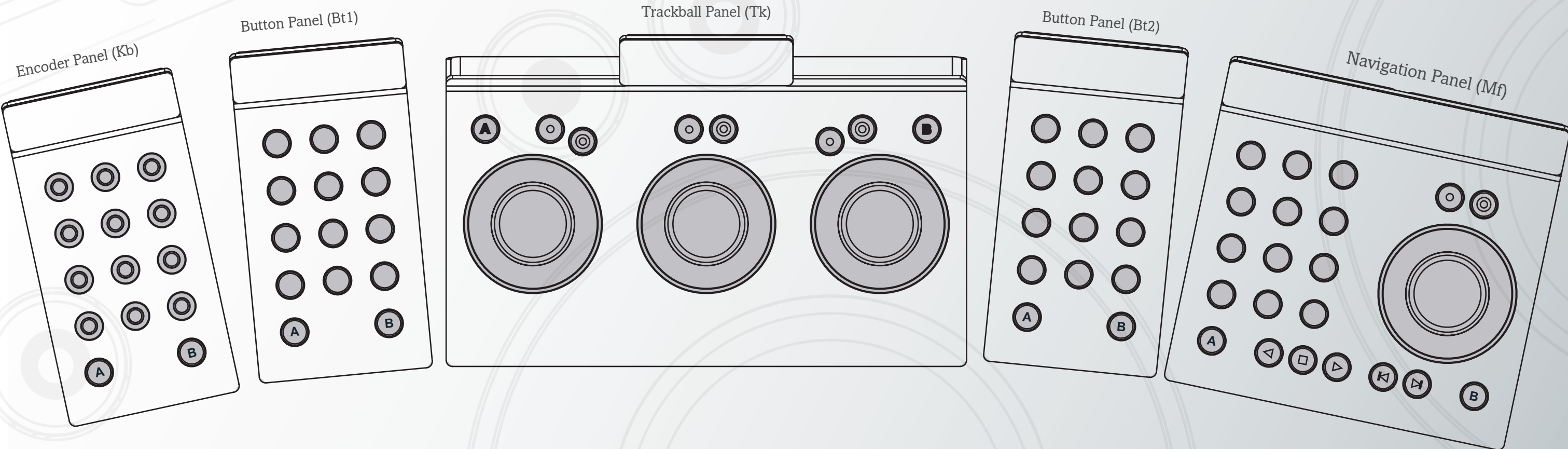
For use with Nucoda or Phoenix, be sure to select the Element Control Panel option when installing the application.

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

Preferences for individual users are managed and selected from within the mapper software from Tangent.

If new effects are added to Nucoda they will added to the mapper, 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 lose all custom preferences.



Navigation and Button Panel - Mf - Bt-2

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

Bt-2 Panel - Bank 1 of 2 - Available in all modes

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

Add Mem	Mem 1	Mem 5
Recal Mem	Mem 2	Mem 6
App Mem	Mem 3	Mem 7
Del Mem	Mem 4	Mem 8

Bt-2 Panel - Bank 2 of 2 - Accessed by pressing (B)

Available in all modes

Quick memories - Select action on left - choose memory slot

Input FX	Base	Master
Pan+Scan	Router	Shapes
Balance	BrightCon	BrightReg
Hue Curve	Keyer	Soft Clip

Bt-2 Panel - Bank 1 of 1 Alternative menu

Accessed by holding down (A) - Available in all modes

Quick Navigation between Base, Master and InputFX and effects

Add CC	Add FX	Add To FX
Layer -	Layer +	Del Layer
Mas Reset	Lyr Reset	FX Reset
Reset All	Undo	Redo

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

Layer navigation
Adding and removing layers.
Resetting Layers and Effects

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

Mf Panel - Bank 2 of 2 - Accessed by pressing (B)

Available in all modes

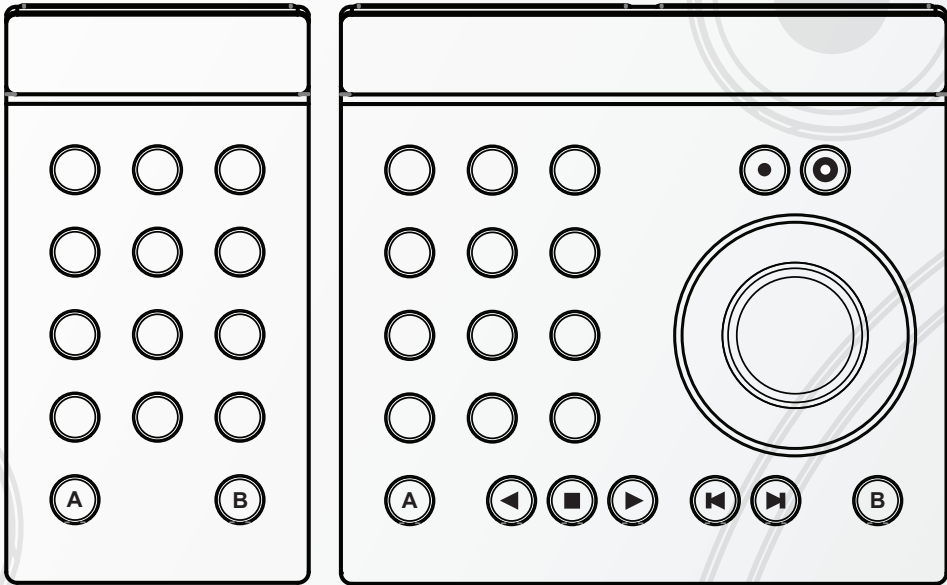
Timeline commands

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

Mf Panel - Bank 1 of 1 Alternative menu

Accessed by holding down (A) - Available in all modes

Playhead navigation - Marks



Button Panel (Bt-2)

Navigation Panel (Mf)

Play Reverse

(A) Frame Back

Stop

(A) Frame Advance

Play Forward

Prev event

(A) Goto last frame of previous event

Next event

(A) Goto last frame of current event

The Jog wheel on the MF panel is mapped by default to the Wipe control for Comparisons, the Ball will move the wipe origin left/Righ and Up/Down

The reset buttons will reset the comparison wipe.

Holding the (A) key while using the ring will jog the playhead on the timeline.

Button and Encoder Panels - Bt-1 - Kb

Menus on these two panels will be effect specific and will update as you move between effects. (The example used here is the Shapes menu) Most effect use only one bank, but there are effect 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.

Ellipse	Rectangle	Auto-Bezr
Shape	Shp Inver	Delete
Vari Soft	Invert All	
		ShowK

Shapes Menu

Bt-1 Panel - Bank 1 of 2 - Effect specific
Shapes menu contains quick shapes and shape related menus and commands. Pressing the Shape key, will select and cycle th

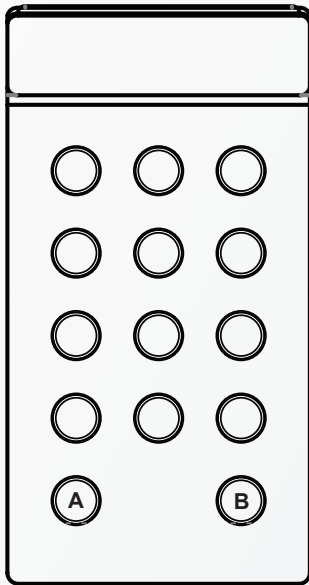
Autokey	Add KF	Del FK
Prev KF	Shapes	Next KF
Trim	Slip	Slide
SceneEdit	Trim Fr -	Trim Fr +

Bt-1 Panel - Bank 2 of 2 - Accessed by pressing (B)

Available in all modes

In some cases where effects have a many parameters, this menu could shift to Bank 3 of 3

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



Button Panel (Bt-1)

The encoders on this panel can be pressed downward to reset the values. Sensitivity can be set in the Tangent mapper application. When making the setting, be sure to use the mouse pointer to click on the arrow head and drag it to the new position on the sensitivity scale, else it will not register the change. This seems to be a bug in the mapping software.

Outer Sft	Inner Sft	Blur Size
Shp Opty	Shp Oper	Soft Fall
Comb Opty	Comb Oper	
Flexibilty	Tightness	TrackType

Shapes Menu

Bt-1 Panel - Bank 1 of 2 - Effect specific
Shapes menu contains shape related menus and commands.

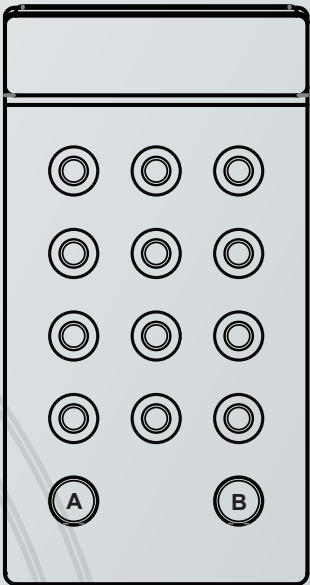
Red	Green	Blue
	Density	Alpha Out
Opacity	Src Input	BlendMode
Blur Size	Sat In	Sat Out

Bt-1 Panel - Bank 2 of 2 - Accessed by pressing (B)

Available in all modes

In some cases where effects have a many parameters, this menu could shift to Bank 3 of 3

This menu allows quick access to Sat in and out, Layer blur, opacity and printer lights. Also inter layer blend modes.



Encoder Panel (Kb)

Trackballs and Rings - Tk

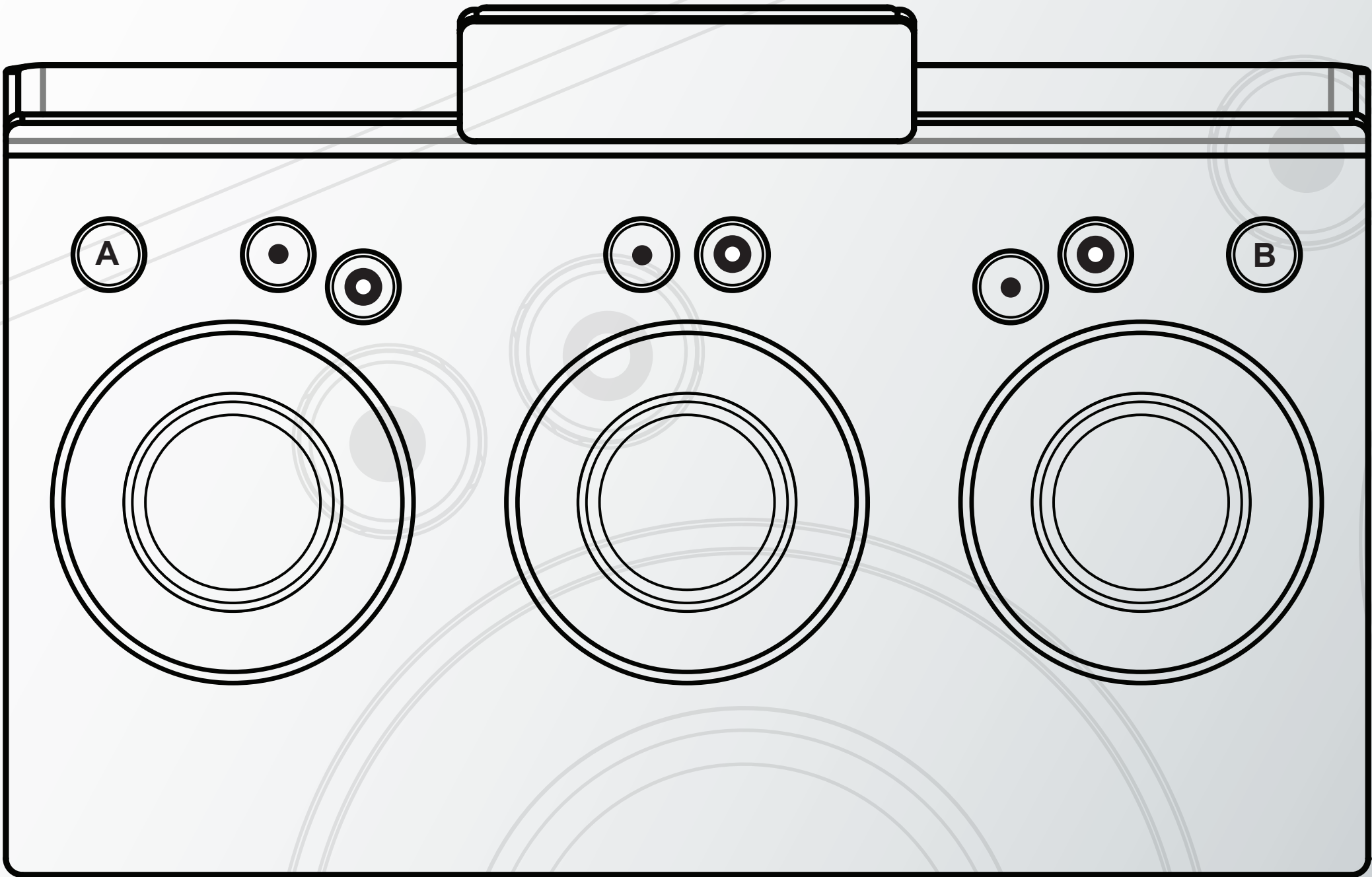
The trackballs and rings are automatically active when a tool is selected that uses them.

Their use is not only limited to colour tools. In the shape tool, with a selected shape, they can be used for positioning, scaling, setting softness and rotation of the selected shape.

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

Use the two reset keys to reset the ball and the ring - use (A) and reset ball or ring to reset other values, for example, resetting the ball may only reset the X value, pressing (A) and repeating the reset will clear the Y value.

Sensitivity can be set in the Tangent mapper application. When making the setting, be sure to use the mouse pointer to click on the arrow head and drag it to the new position on the sensitivity scale, else it will not register the change. This seems to be a bug in the mapping software.



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

Bt-2 Panel - Bank 1 of 2 - Available in all modes

- Compare - Switches compare mode on/off
- Mem Src - Chooses the comparison source from the Mem
- Comp Type - Selects between the available compare options
- Src Sel + and - Choose a source (event, track, note)
- Cue event - 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 preset
- Loop - Set playback mode for timeline playback.
- Recall - Recall selected layers to current selected shot
- Append - Append selected presets to current note

Add Mem	Mem 1	Mem 5
Recal Mem	Mem 2	Mem 6
App Mem	Mem 3	Mem 7
Del Mem	Mem 4	Mem 8

Bt-2 Panel - Bank 2 of 2 - Accessed by pressing (B) Available in all modes

- Add Mem - When selected, pressing Mem 1 - Mem 8 will store a quick memory.
- Recall Mem - When selected, pressing Mem 1 - Mem 8 will recall a quick memory
- App Mem - When selected, pressing Mem 1 - Mem 8 will append a quick memory
- Del Mem - When selected, pressing Mem 1 - Mem 8 will delete a quick memory

Input FX	Base	Master
Pan+Scan	Router	Shapes
Balance	BrightCon	BrightReg
Hue Curve	Keyer	Soft Clip

Bt-2 Panel - Bank 1 of 1 Alternative menu - Accessed by holding down (A) - Available in all modes

These commands will allow the user to navigate to the selected layer (Input FX, Base, Master) or to the selected effect.

Add CC	Add FX	Add To FX
Layer -	Layer +	Del Layer
Mas Reset	Lyr Reset	FX Reset
Reset All	Undo	Redo

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

- 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 - Navigate between colour and FX layers
- Del Layer - Delete current layer
- Mas Reset - Delete all layers on the current shot
- Lyr Reset - Reset the current colour/fx layer
- FX Reset - Reset only the selected colour effect
- Reset All - Will reset all layers in shot, including Input FX Layers
- Undo and Redo

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

Mf Panel - Bank 2 of 2 - Accessed by pressing (B) Available in all modes

- Add Dyn - Position cursor at start point and select - move cursor and select to determine the ending point
- 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 / - Switch between library and mems views

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

Mf Panel - Bank 1 of 1 Alternative menu - Accessed by holding down (A) - Available in all modes

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

Ellipse	Rectangle	Auto-Bezr
Shape	Shp Inver	Delete
Vari Soft	Invert All	
		ShowK

Bt-1 Panel - Bank 1 of 2 - Effect specific

- Ellipse - Add ellipse to current shot
- Rectangle - Add rectangle to current shot
- Auto-Bezr - Create auto bezier - use mouse or pen to complete
- Shape - Press to select shape or press again to cycle through available shapes
- Shp Inver - Invert current shape
- Delete - Delete selected shape
- Vari Soft - Turn on variable softness for selected shape
- Invert All - Invert all shapes on layer
- ShowK - Show alpha for shapes

Autokey	Add KF	Del FK
Prev KF	Shapes	Next KF
Trim	Slip	Slide
SceneEdit	Trim Fr -	Trim Fr +

Bt-1 Panel - Bank 2 of 2 - Accessed by pressing (B) - Available in all modes
In some cases where effects have a many parameters, this menu could shift to Bank 3 or 4

- Autokey - Turn on Autokey - keyframe is set for every parameter change - automatically turn of on new shot
- Add KF - Manually add keyframe
- Del KF - Delete KF (When on keyframe position)
- Prev KF / Next KF - Navigate keyframes
- Trim - Turn on trim mode (make sure there are handles available and that scene edits (blue lines) are removed
Pressing again will cycle to segment mode and again will cycle back to timeline mode.

- Slip - Select slip mode
- Slide - Select slide mode
- SceneEdit - Select scene cuts on timeline and press the SceneEdit button to change them into normal cuts.
- Trim Fr - and + Frame offsets for trim/slip and slide modes

- Shapes - Go to shapes menu in current layer

Outer Sft	Inner Sft	Blur Size
Shp Opty	Shp Oper	Soft Fall
Comb Opty	Comb Oper	
Flexibilty	Tightness	TrackType

- Bt-1 Panel - Bank 1 of 2 - Effect specific**
- Outer Sft - Set outer softness on shape (Also use first ring to set softness)
 - Inner Sft - Set inner softness
 - Blur size - Set blur size
 - Shp Opty - Set shape opacity
 - Shp Oper - Boolean operation for selected shape
 - Soft Fall - Change softness fall off for selected shape
 - Comb Opty - set opacity for all shapes on layer
 - Comb Oper - Boolean operation for all shapes
 - Flexibility - Set flexibility for Deform tracker
 - Tightness - Set tightness for Deform tracker
 - Tracktype - Select between Deform and Transfor tracker. - Use GUI to track shape forward or backward.

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

Bt-1 Panel - Bank 2 of 2 - Accessed by pressing (B) - Available in all modes
In some cases where effects have a many parameters, this menu could shift to Bank 3 of 3

- Access Reg Green and Blue printer lights.
- Access to printerlights density
- Alpha out - use to export layer alpha to other layer
- Opacity - set inter layer opacity
- Src Input - select layer source (Original, previous or base correction)
- BlendMode - Set inter layer blend modes
- Blur size - Set layer blur
- Sat in - Access to saturation tool
- Sat out - Access to saturation tool in HSL toolset

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