

The Figure Inspector

Animation Pro figures have a lot of properties, most of which may be animated. They can all be found within the Figure Inspector. To open the Figure Inspector, tap on the 'Magnifying Glass' button () at the bottom-left corner of the Animation screen.

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The Figure Inspector Panel

The Figure Inspector is a floating panel that may be moved around the Animation screen. It contains multiple tabs that organise a figure's properties into a series of different categories. Tap on a figure's Anchor Point to view or modify its properties in the Figure Inspector (or use the 'Select Figure' button at the top of the inspector to choose a figure).

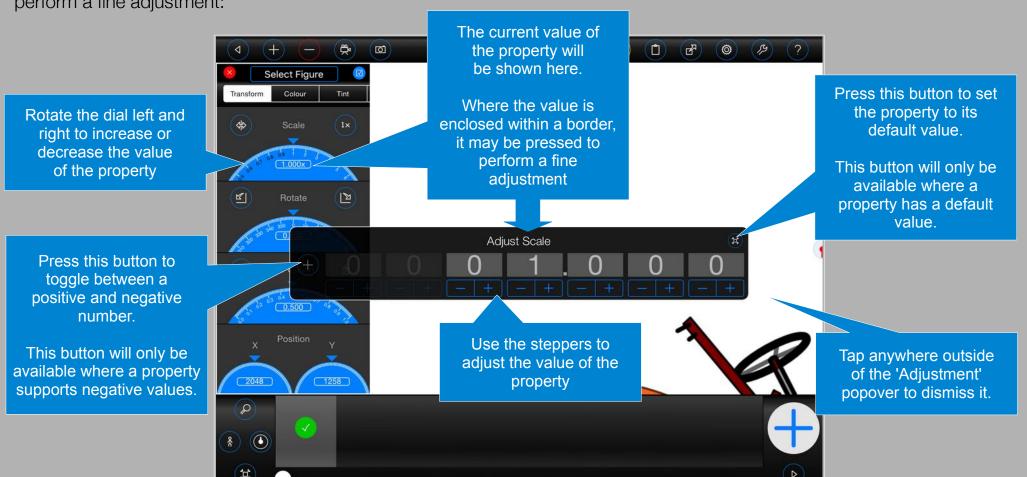




Making Adjustments

Animation Pro makes use of dials wherever possible for adjusting settings/properties. In some cases an 'Adjustment' popover may also be opened to facilitate even finer adjustments.

- Use your finger to rotate a dial to the left or to the right. Generally speaking, rotating a dial to the left will increase the value of a property. Rotating a dial to the right will decrease its value.
- Dials will display the value of the property being modified. Where the value is enclosed within a border, it may be pressed to perform a fine adjustment:





Selecting Figures

Every Animation Pro figure will have an anchor point that looks like this:



or this (where the figure is a clone):

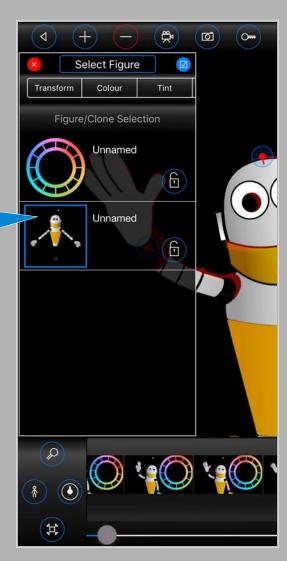


You can tap on these anchor points to select your figures. Sometimes, however, anchor points may overlap making them difficult to select. When this occurs, you can use the Figure Inspector as shown below:



Press this button to select a figure

Tap on a figure thumbnail to select a figure

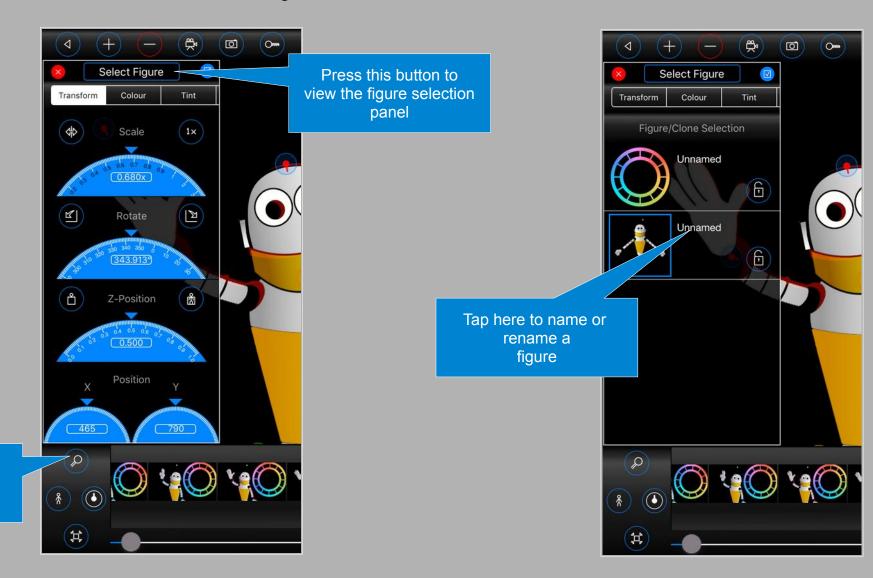


Press this button to open the Figure Inspector



Naming Figures

If you are using the same figure over and over again, it might get a little difficult telling one from another, especially if they are moving from frame to frame. Animation Pro thus allows figures to be named:



Press this button to open the Figure Inspector

Enter a new name for the figure



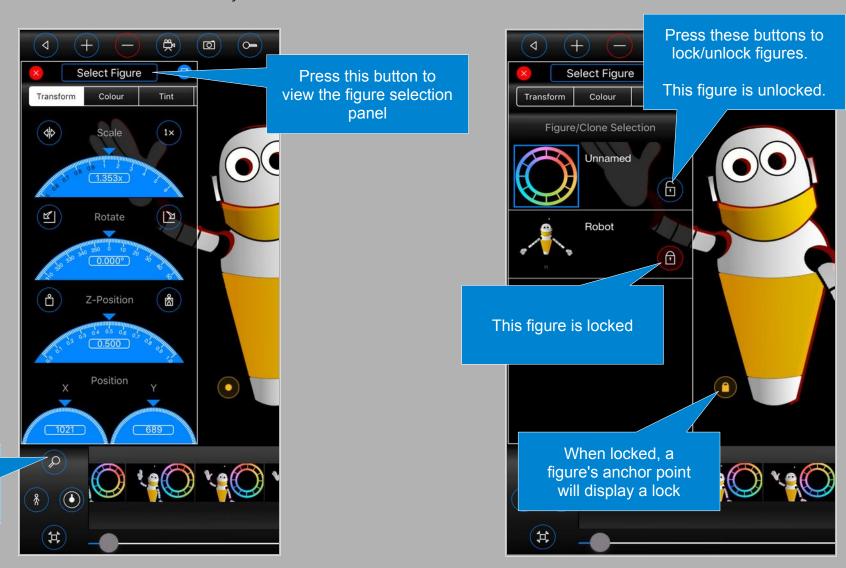


You can hold down this button to view the names given to figures whilst animating



Locking Figures

Animation Pro allows figures to be locked. When locked, a figure will not respond to touches. This can be useful where you have a lot of figures in a frame and don't wish to accidentally move one or more of them.



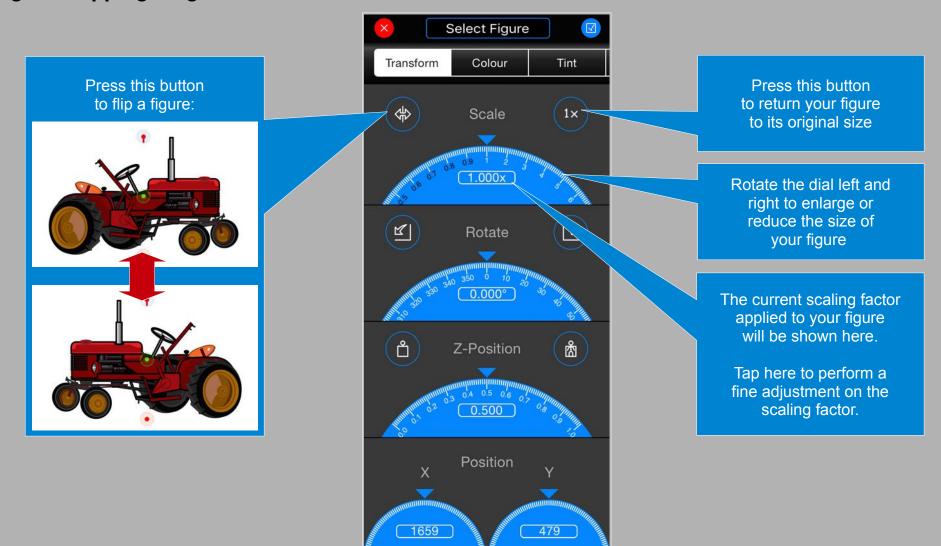
Press this button to open the Figure Inspector



Transform Category

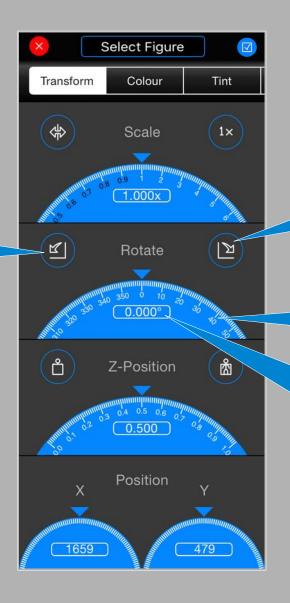
The Transform category contains the basic settings to move, rotate, resize and/or flip a figure:

Scaling and flipping a figure



Rotating a figure

Press this button to rotate your figure 90 degrees anti-clockwise



Press this button to rotate your figure 90 degrees clockwise

Turn the dial left and right to rotate your figure

The current angle of rotation applied to your figure will be shown here.

Tap here to perform a fine adjustment on the figure's angle.

Figure Z-Position

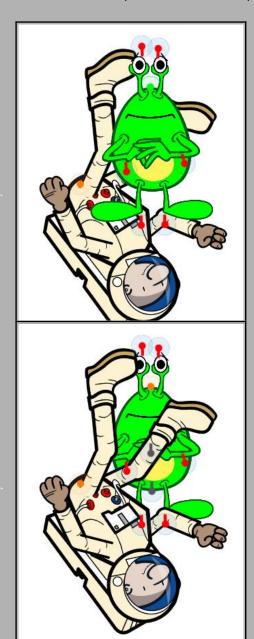
You can move figures left and right (their X-Position), up and down (their Y-Position) or to the back or to the front (their Z-Position).

- Decreasing the Z-Position of a figure moves it to the back.
- Increasing the Z-Position of a figure moves it to the front.

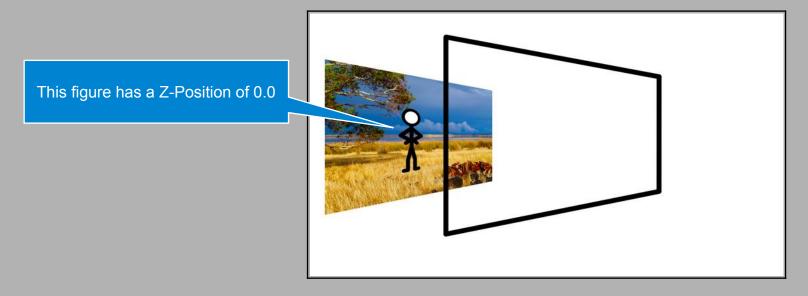
Example:

The astronaut has a lower Z-Position than the alien

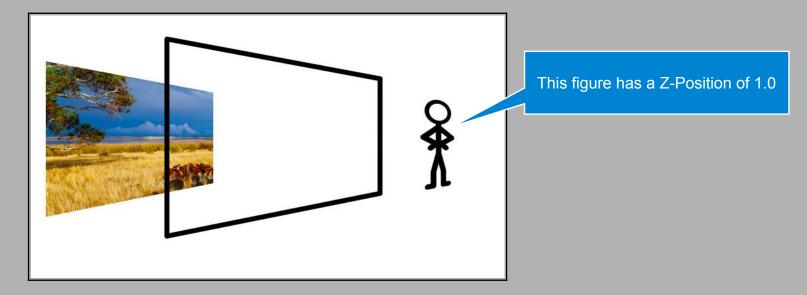
The astronaut has a higher Z-Position than the alien



When creating a 3D animation, the Z-Position of a figure also determines how far 'behind' the screen the figure appears:



Or how far 'in front' of the screen the figure appears:



For more details on 3D animation, check out the '3D Animation' topic (see left).

Adjusting a Figure's Z-Position

Press this button

to move your figure

behind all of the other

figures



Press this button to move your figure to the front of all of the other figures

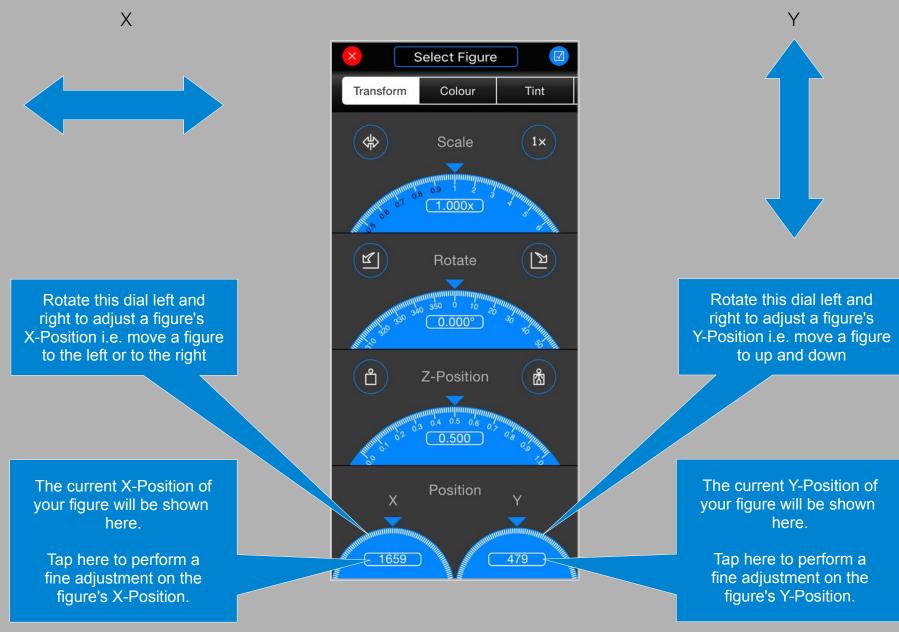
Turn the dial left and right to increase or decrease the Z-Position of your figure

The current Z-Position of your figure will be shown here.

Tap here to perform a fine adjustment on the figure's Z-Position.

Adjusting a Figure's X or Y Position

You can move a figure around by dragging its Anchor Point. Alternatively, for more precise control, you can use the Figure Inspector:



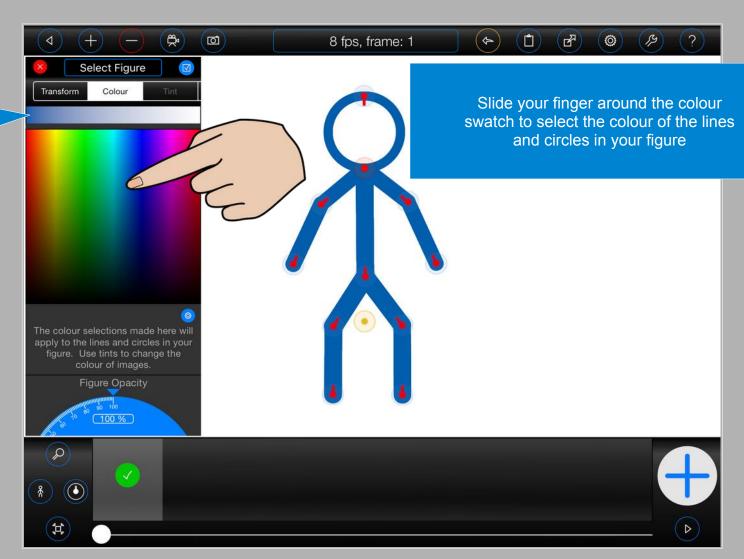


Colour Category

The Colour category allows the colour of all of the lines and circles within your figures to be adjusted at once. It also allows the overall opacity of your figures to be set.

Setting the Colour of the Lines and Circles in Your Figures

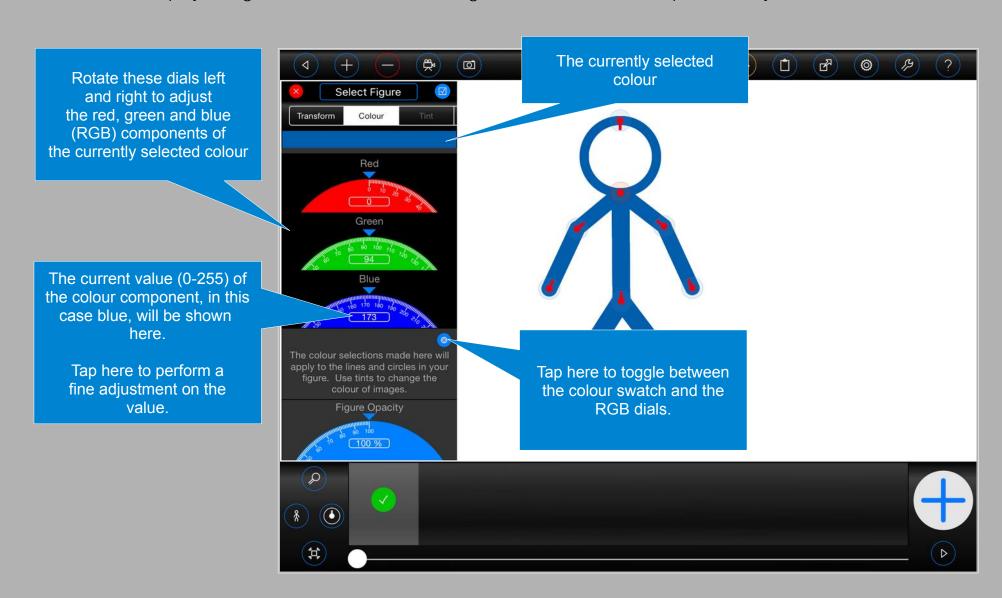
Touch any point on the colour gradient here to choose a lighter version of the currently selected colour



Setting the Colour of the Lines and Circles in Your Figures (continued)

For more precise colour selection, tap on the o button.

Animation Pro will display red, green and blue dials, allowing the individual RGB components of your colour to be selected:



Adjusting a Figure's Opacity

By default, Animation Pro figures are completely, 100%, opaque i.e. you cannot see through them. It is possible, however, to adjust their opacity all the way down to 0% such that they are completely transparent.

Rotate this dial left and right to adjust a figure's opacity

The current opacity of your figure will be shown here.

Tap here to perform a fine adjustment on the figure's opacity.



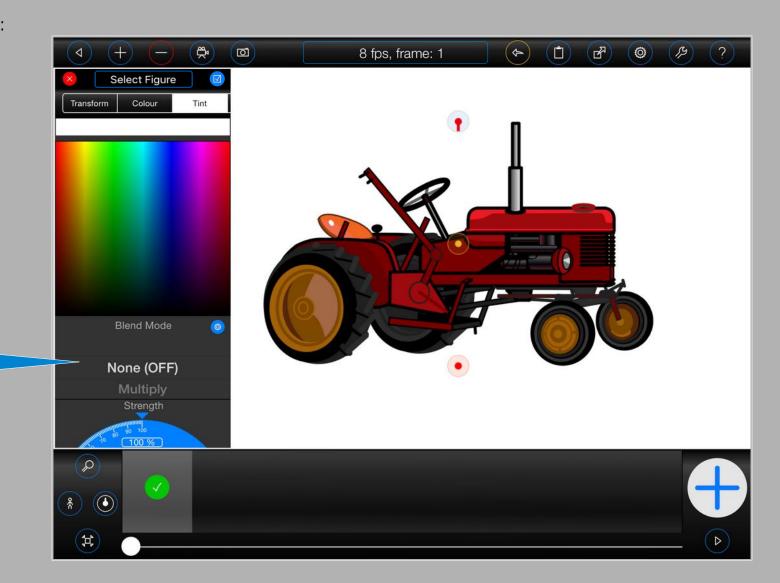


Tint Category

The Tint category allows the existing colours of all items within your figures to be adjusted at once.

Tinting Items in Your Figures

1. Start by selecting a 'Blend Mode':

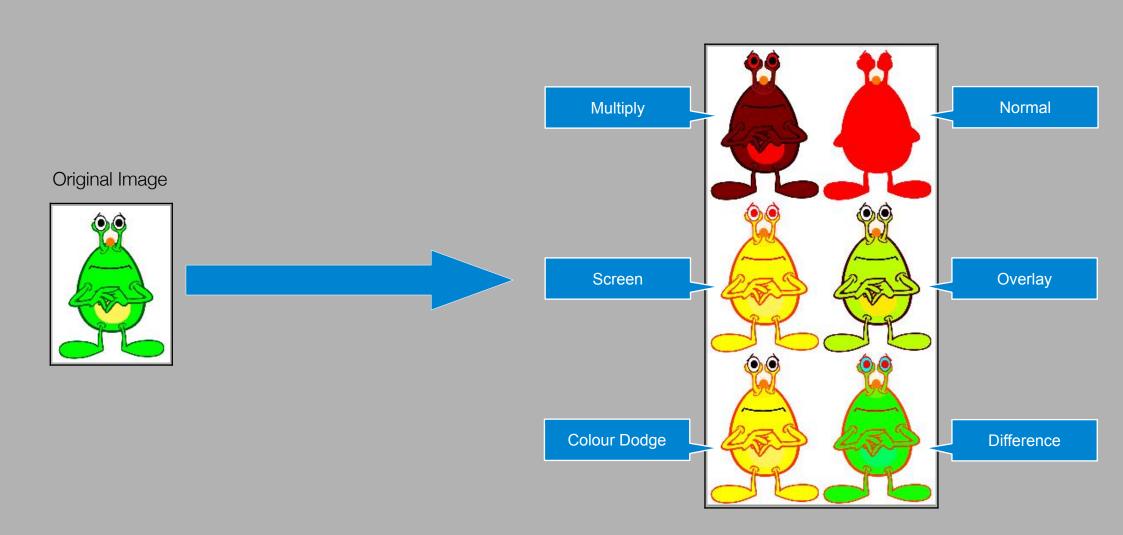


Select a 'Blend Mode' from the list here

Blend Modes

When tinting a figure, the selected tint colour is blended with the existing colours in the figure. The way in which the tint colour is blended is based upon a 'Blend Mode'.

Here are few different blend mode examples (where red has been applied as a tint colour):



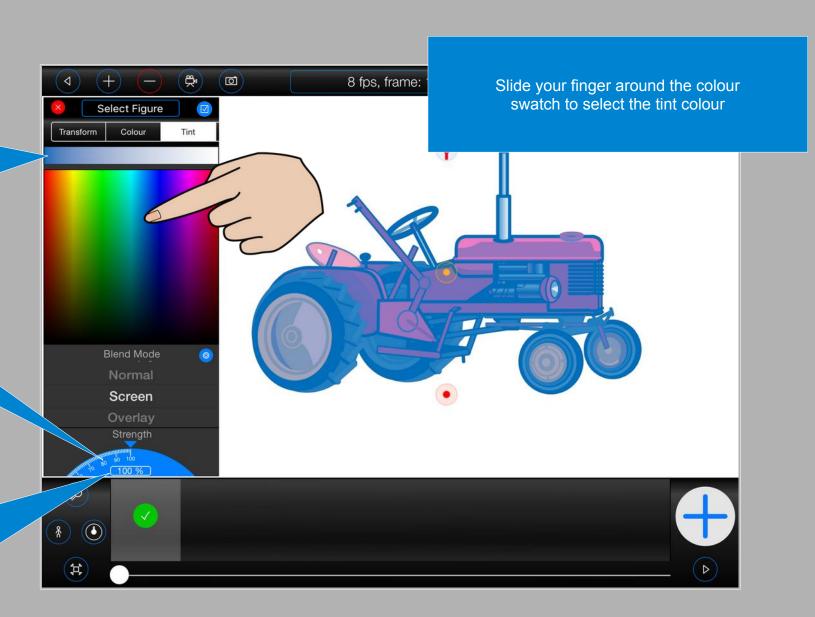
2. Select a tint colour and its strength:

Touch any point on the colour gradient here to choose a lighter version of the currently selected tint colour

Rotate this dial left and right to adjust the strength of the tint

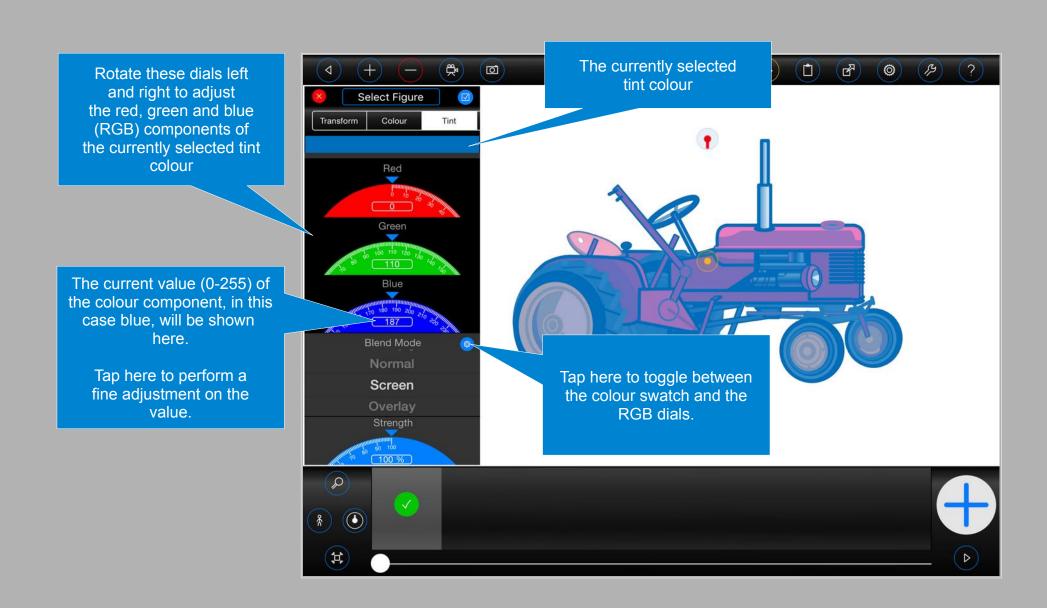
The current strength of the tint will be shown here.

Tap here to perform a fine adjustment on the tint strength.



For more precise tint colour selection, tap on the obutton.

Animation Pro will display red, green and blue dials, allowing the individual RGB components of your colour to be selected:



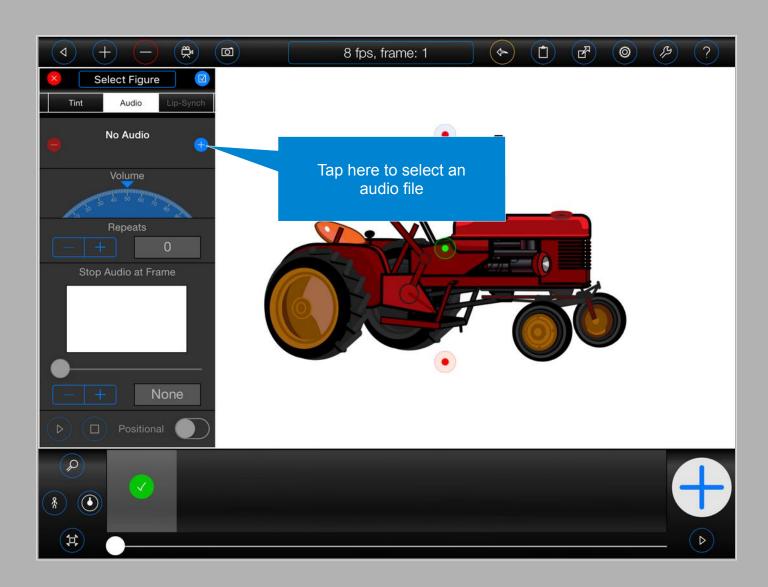


Audio Category

Each figure in an Animation Pro animation may be assigned one audio file per frame.

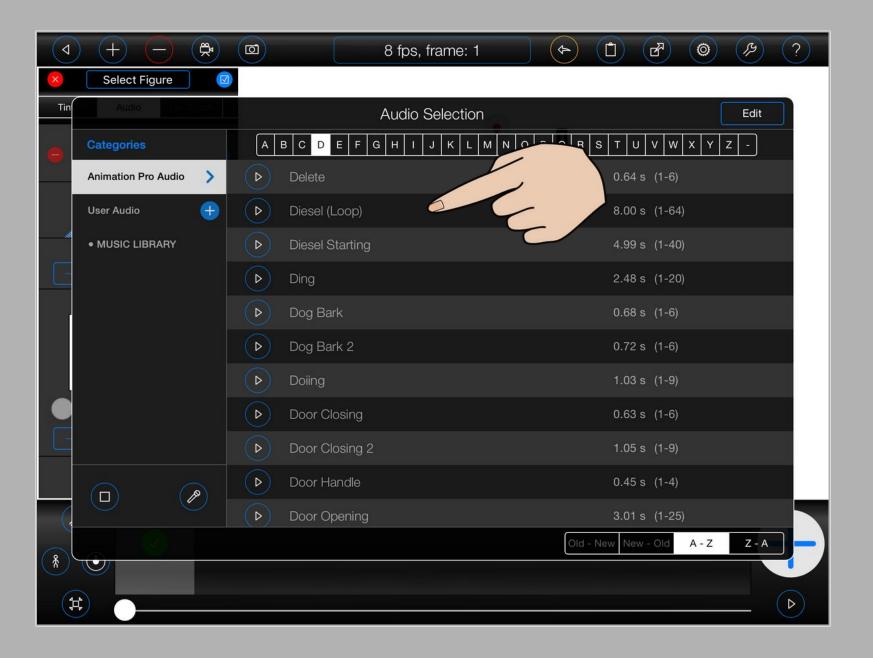
Selecting an Audio File

1. Press the + button to select an audio file:



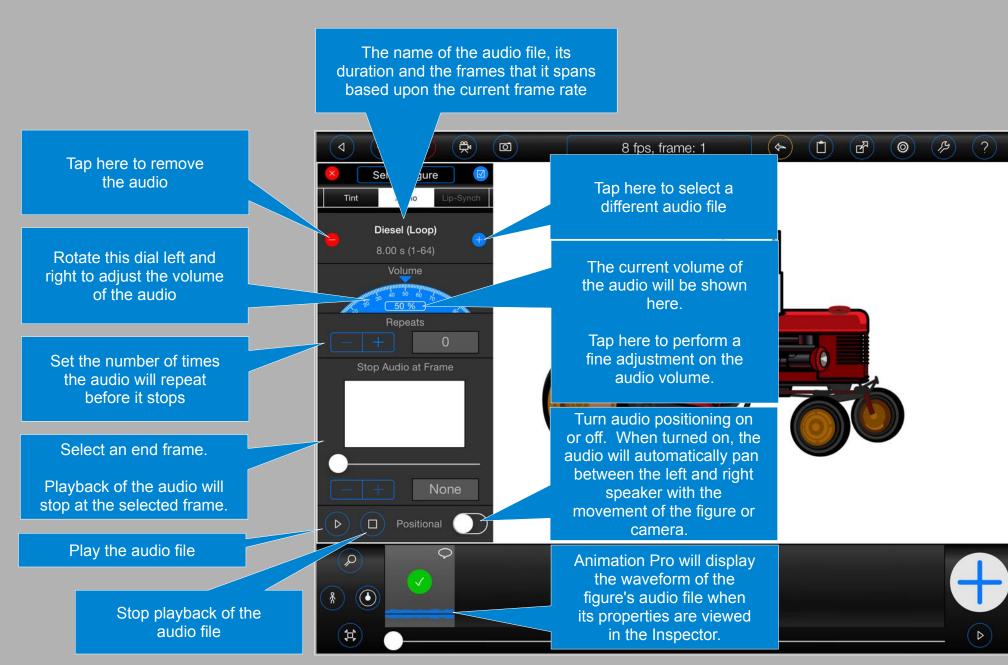
2. Use the Animation Pro File Manager to select your audio file

For more information on using the Animation Pro File Manager, please refer to the 'File Manager' topic (see left).



Adjusting Audio Properties

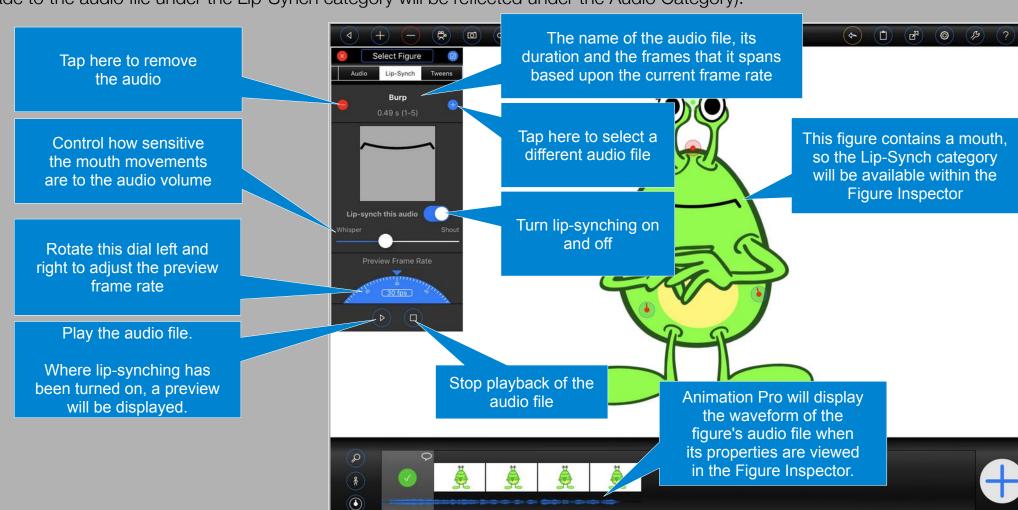
Once an audio file has been added to a figure on a given frame, its properties may be modified using the Figure Inspector:





Lip-Synch Category

The Lip-Synch category will be available when the selected figure contains a mouth. It allows for lip-synching to be turned on/off and provides a means of previewing the lip-synching without having to export your animation. Please note that, for convenience, an audio file may also be selected here. A figure, however, may only have one audio file associated with it per frame. So, if you've already selected an audio file, via the Audio Category, then it will also be displayed under the Lip-Synch category (and any changes made to the audio file under the Lip-Synch category will be reflected under the Audio Category).





Tweens Category

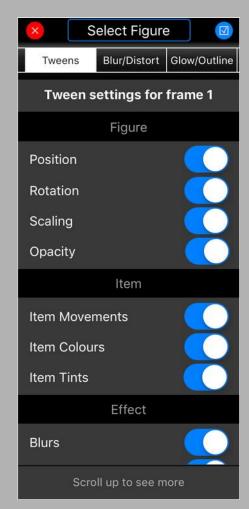
Animation Pro can automatically produce 'tweens' in your exported animations. These are additional frames, in-be**TWEEN** the frames that you create and can make the playback of your animations a lot smoother. For more information regarding 'tweens' please refer to the 'Tweening' topic (see left).

When exporting your animations, you can specify how many 'tweens' Animation Pro should produce. There are some situations, however, where you may wish to turn 'tweening' off for a given figure for a given period of time; for example, should you wish the colour of a figure to abruptly change. Animation Pro thus allows the 'tweening' of certain figure properties to be turned on and off within the Figure Inspector.

When 'tweening' is turned off for a given figure property on a given frame, no 'tweening' of that property will occur until the 'tweening' is turned back on again in a subsequent frame, regardless of the number of 'tweens' specified when exporting your animation.

It's also important to note that these settings are copied from one frame to the next whenever you add a new frame to your animation.

To make this easier to visualise, let's consider a series of simple animations with two frames. Let's also assume that we are going to export these animations with two 'tweens' between each frame. The following pages show the effects of turning each of the 'tweening' properties off and on in frame one.



Tween Position OFF









Tween Position ON









Tween Rotation OFF









Tween Rotation ON









Tween Scaling OFF









Tween Scaling ON









Tween Opacity OFF









Tween Opacity ON

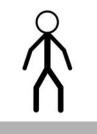






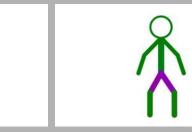


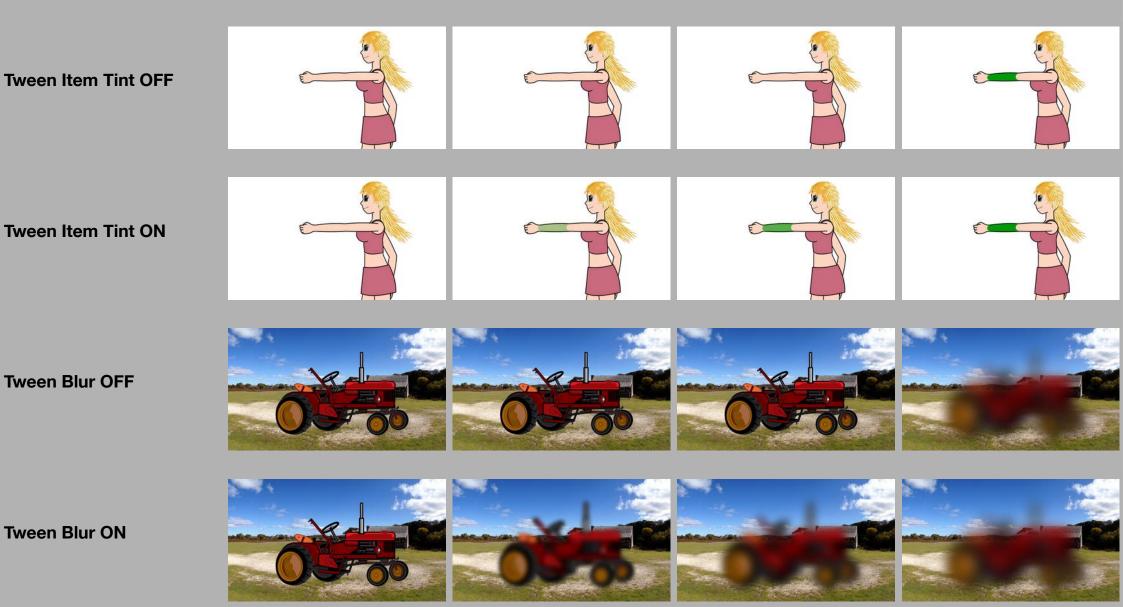
Tween Items Colours ON











Tween Distortions OFF









Tween Distortions ON









Tween Shearing OFF









Tween Shearing ON



















Tween X/Y Scaling ON





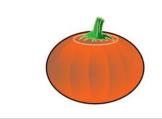




Tween Accent/Highlight OFF









Tween Accent/Highlight ON











Blur/Distort Category

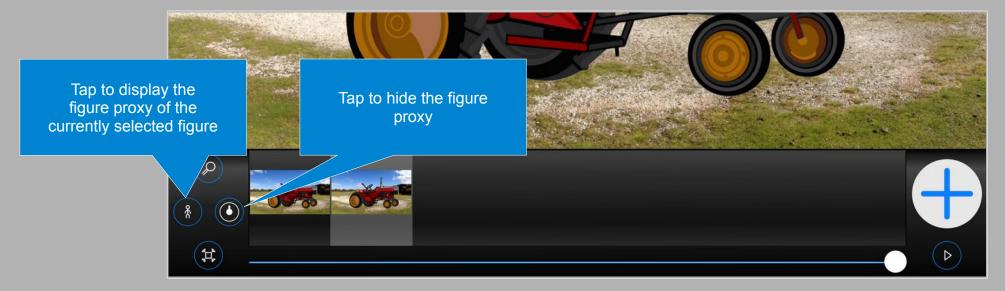
Figure Proxies

Animation Pro allows effects to be applied to figures, such as blurs and distortions. To achieve this, the figures are first converted into images, known as a figure proxies, after which the effects are applied. Whilst in this state, the items within your figures cannot be manipulated and their handles will not be shown.

Press (*) to display the figure proxy for the currently selected figure i.e. this will apply all effects, such as blurs or distortions

Press (b) to display the underlying figure without any effects applied – this will display all of the figure handles

Alternatively, you can tap on the Anchor Point of a figure proxy to display the underlying figure and its handles.



Please note:

The button will display the handles for all items in your figures. This allows those items to be selected for adjustment. Please see the 'Adjusting Items' help topic (left) for more information.

Blurring a Figure

A blur is an image effect that requires a figure to be converted into a figure proxy (please see 'Figure Proxies', above).

Rotate this dial left and right to adjust the strength of the blur

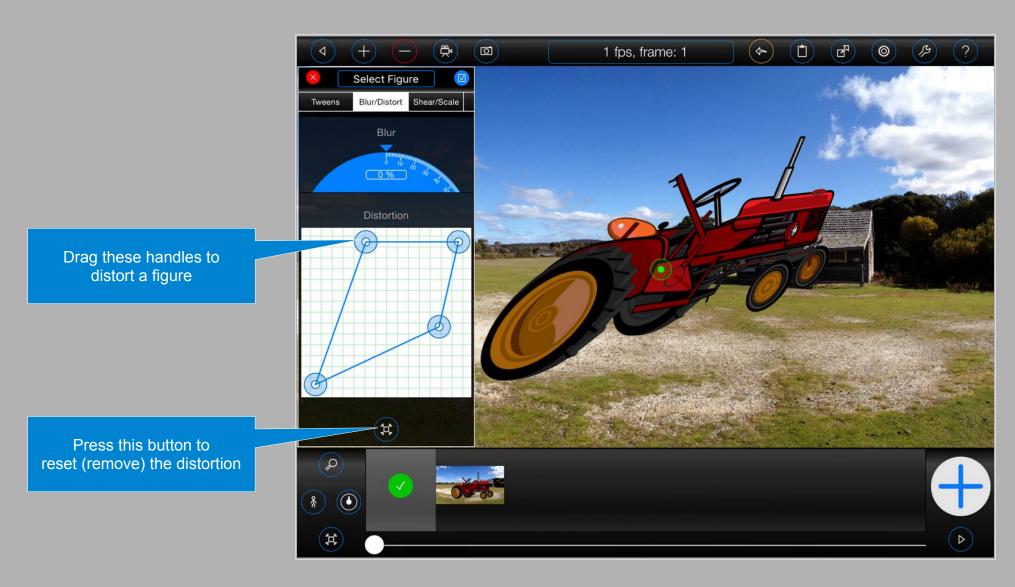
The current strength of the blur (0 – 100%) will be shown here.

Tap here to perform a fine adjustment on the blur percentage.



Distorting a Figure

A distortion is an image effect that requires a figure to be converted into a figure proxy (please see 'Figure Proxies', above).





Outline/Glow Category

It is possible to add outlines to figures or to make figures glow. This requires the figures to be converted into figure proxies (please see 'Figure Proxies', above, for more information).

Add the effect behind the figure

Tap to select a lighter shade of the selected colour

Colour swatch: Tap to select a colour

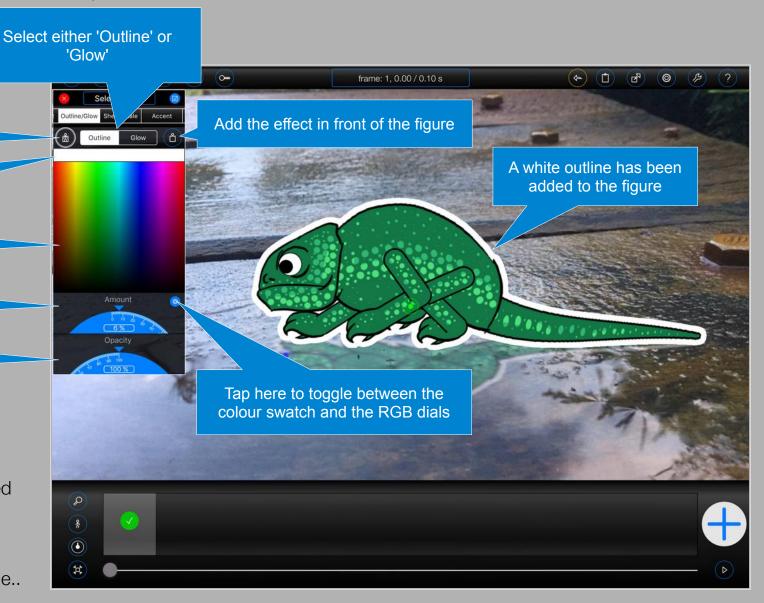
Set the extent of the outline/glow

Set the opacity of the outline/glow

Please note:

Outlines may appear 'jagged' whilst animating. Anti-aliasing will be applied automatically during exports.

Examples are shown on the next page...

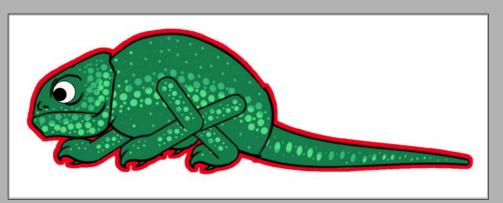


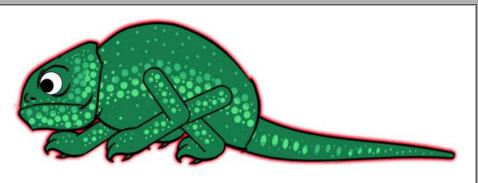
5% red outline with 100% opacity behind the figure:

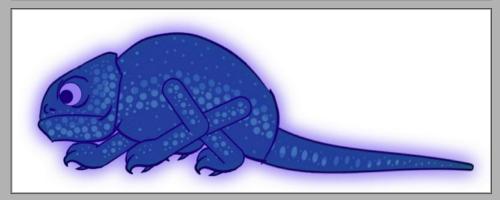
5% red glow with 100% opacity behind the figure:

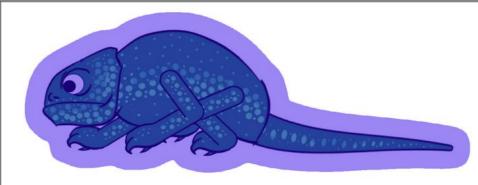
25% blue glow with 50% opacity in front of the figure:

25% blue outline with 50% opacity in front of the figure:











Shear/Scale Category

The X and Y axis of Animation Pro figures may be independently sheared or scaled. This requires the figures to be converted into figure proxies (please see 'Figure Proxies', above, for more information).

Shearing a Figure

X-Axis Shear Y-Axis Shear



Shearing a Figure

The current X-Axis shear applied to your figure will be shown here.

Tap here to perform a fine adjustment on the figure's X-Axis shear.

The current Y-Axis shear applied to your figure will be shown here.

Tap here to perform a fine adjustment on the figure's Y-Axis shear.



Turn the dial left and right to increase or decrease the X-Axis shear applied to your figure

Turn the dial left and right to increase or decrease the Y-Axis shear applied to your figure

X-Axis and Y-Axis scaling of a Figure

You can use the 'Scale' dial found under the Transform category to enlarge or your reduce your figures whilst maintaining their aspect ratio. Alternatively, you may use X and Y-Axis scaling to stretch or compress your figures in one direction more than the other. This requires the figures to be converted into figure proxies (please see 'Figure Proxies', above, for more information).

X-Axis Scale Y-Axis Scale



X-Axis and Y-Axis scaling of a Figure

The current X-Axis scale applied to your figure will be shown here.

Tap here to perform a fine adjustment on the figure's X-Axis scale.

The current Y-Axis scale applied to your figure will be shown here.

Tap here to perform a fine adjustment on the figure's Y-Axis scale.



Turn the dial left and right to increase or decrease the X-Axis scale applied to your figure

Turn the dial left and right to increase or decrease the Y-Axis scale applied to your figure



Accent Category

Animation Pro can automatically accent your figures with blurred shadows or colour highlights.

Adding an Accent

Touch any point on the colour gradient here to choose a lighter version of the currently selected colour

Slide your finger around the colour swatch to select the accent colour

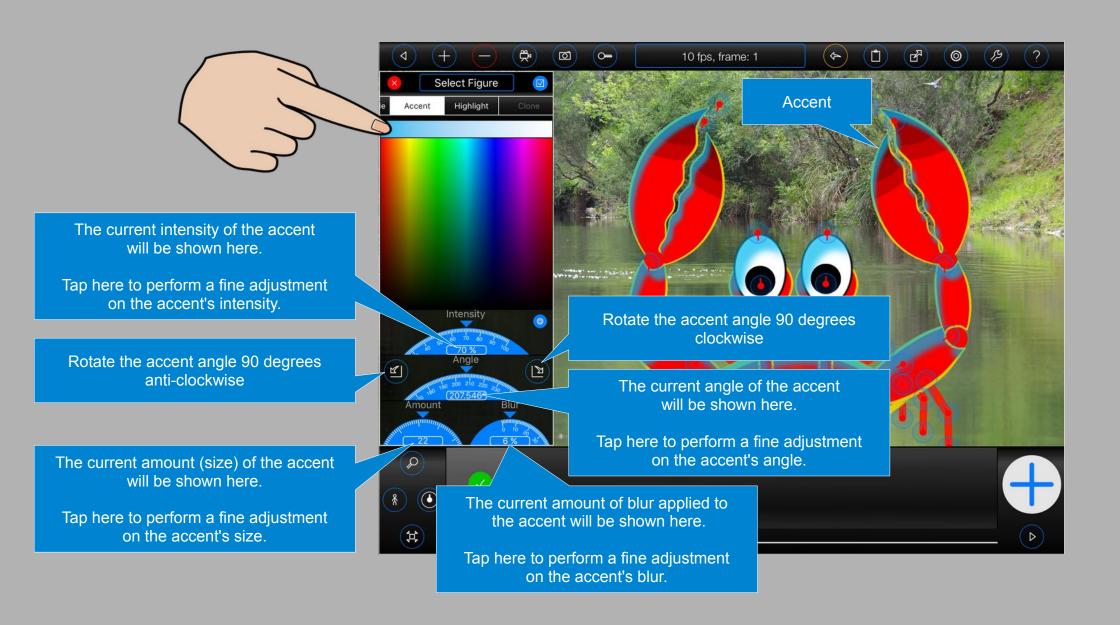
Rotate this dial left and right to adjust the intensity (strength) of the accent

Rotate this dial left and right to choose the angle of the accent

Rotate this dial left and right to choose the amount (size) of the accent



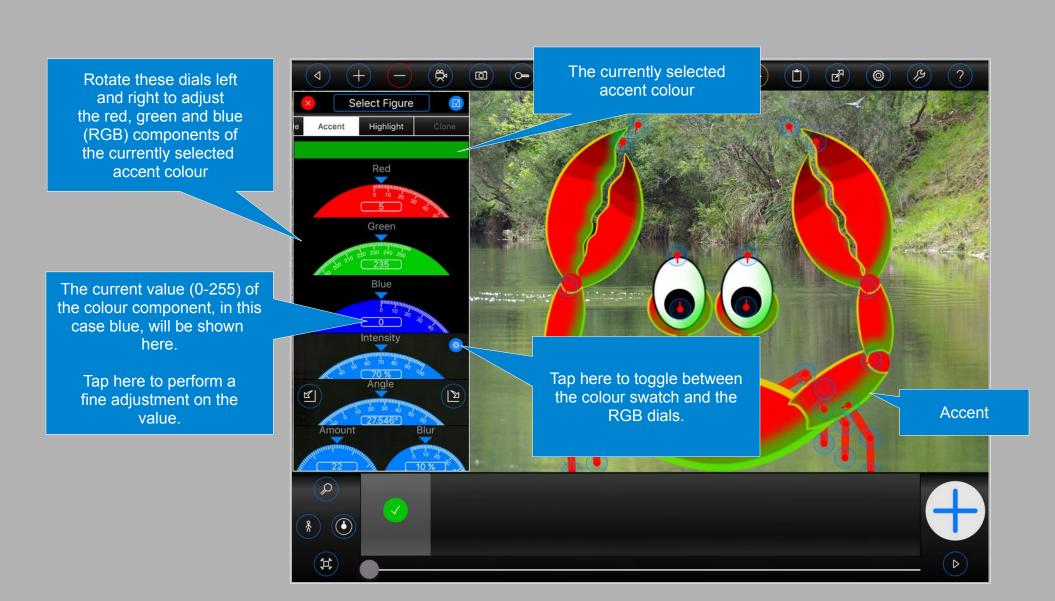
Adding an Accent (continued)



Adding an Accent (continued)

For more precise accent colour selection, tap on the obutton.

Animation Pro will display red, green and blue dials, allowing the individual RGB components of your colour to be selected:





Highlight Category

Animation Pro can automatically highlight your figures to give the illusion that light is shining upon them.

Highlighting a Figure

Touch any point on the colour gradient here to choose a lighter version of the currently selected colour

Slide your finger around the colour swatch to select the highlight colour

Rotate this dial left and right to adjust the intensity (strength) of the highlight

Rotate this dial left and right to choose the angle of the highlight

Rotate this dial left and right to choose the amount (size) of the highlight



Highlighting a Figure (continued)

The current intensity of the highlight will be shown here.

Tap here to perform a fine adjustment on the highlight's intensity.

Rotate the highlight angle 90 degrees anti-clockwise

The current amount (size) of the highlight will be shown here.

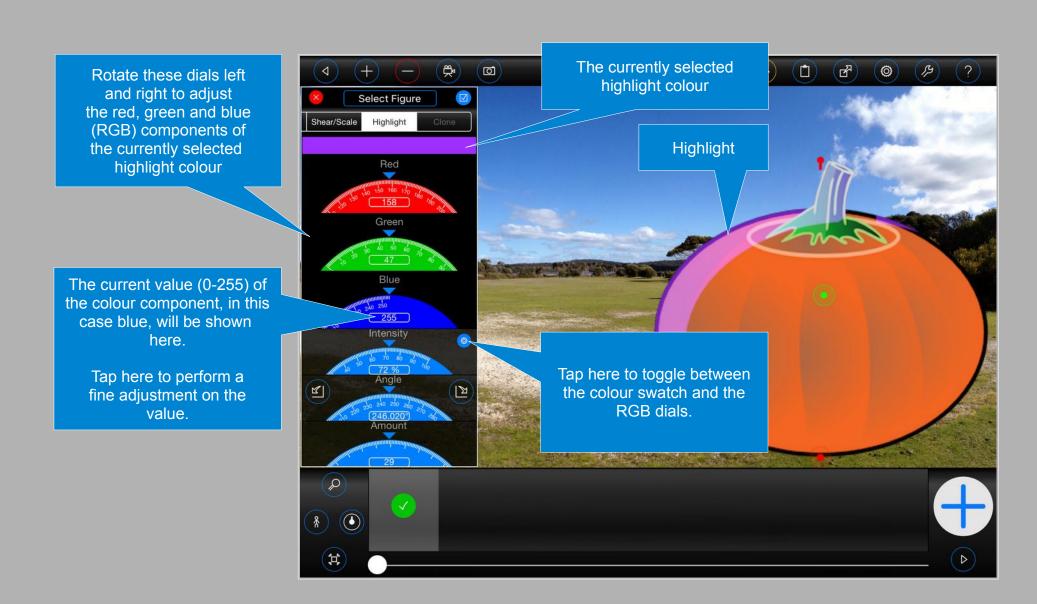
Tap here to perform a fine adjustment on the highlight's size.



Highlighting a Figure (continued)

For more precise highlight colour selection, tap on the obutton.

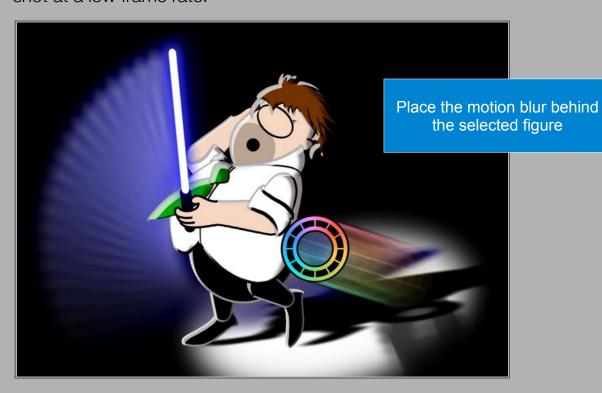
Animation Pro will display red, green and blue dials, allowing the individual RGB components of your colour to be selected:





Motion Blur Category

Animation Pro can generate a form of translational motion blur to simulate what happens in a film when fast moving objects are shot at a low frame rate:

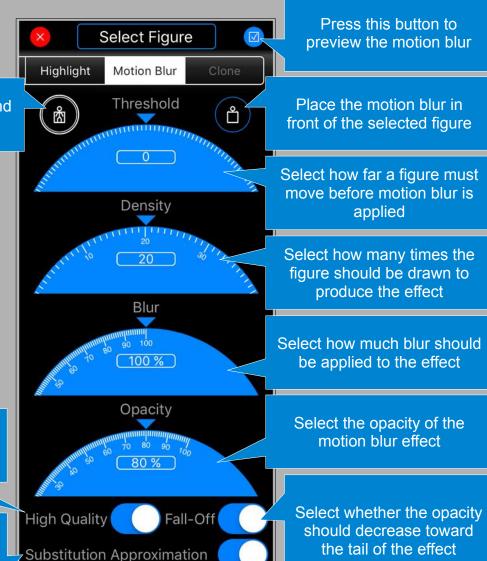


Please note that motion blur will NOT be shown whilst animating.

For more details regarding motion blur, please refer to the 'Motion Blur' topic (left).

Select whether high resolution motion blur effects should be produced

Select whether motion blur should be approximated across figure substitutions





Stylise Category

One of several stylisations may be applied to Animation Pro figures to alter their overall appearance or to apply an effect.

Select the stylisation that you would like to apply from the list

Each stylisation will have different options allowing you to adjust its appearance



Some of the stylisations, such as 'Sparkle' and 'Bad Reception', are randomly generated. This means that their appearance will randomly change each time a figure is updated (or from frame to frame and tween to tween when an animation is exported).

Limitations

Randomly generated stylisations, however, come with the following limitations:

They may not be displayed correctly when performing 'Quick Previews'. The 'Quick Preview' functionality utilises the thumbnail images to generate instant previews. Copied frames will thus have the same images and it will appear as if the randomly generated stylisations are not changing for these frames.

These stylisations will also be randomly generated in clones. This means that it is not possible to use these particular stylisations in clones if those clones are intended to be exact reproductions of their parent figures. Shadows, for example, will not exactly match their parent figures where these stylisations are used (so stylisations will not be cloned by default for shadows).

These stylisations may appear different in loaded frames/tweens vs. the thumbnail images for those frame/tweens.

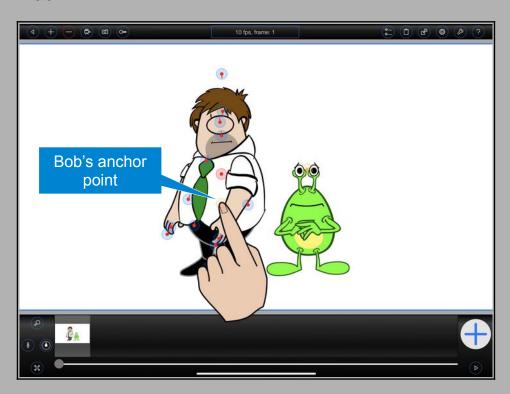




Blend Category

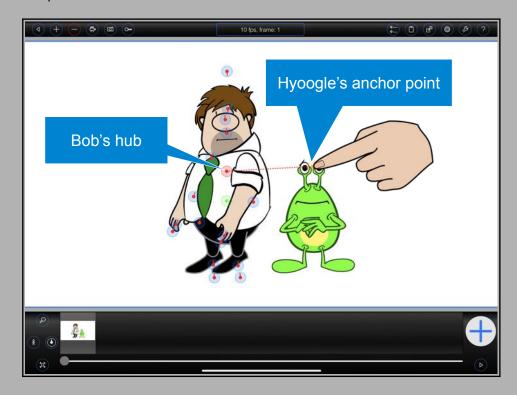
An Animation Pro figure can be blended with another Animation Pro figure. This technique may be used to create some really cool effects. Let's say, for example, that we'd like to blend Bob (that's him, right, with the disgusting green tie and the bad haircut) with Hyoogle, the little green alien.

1. Tap on Bob's anchor point to reveal his handles and hub:

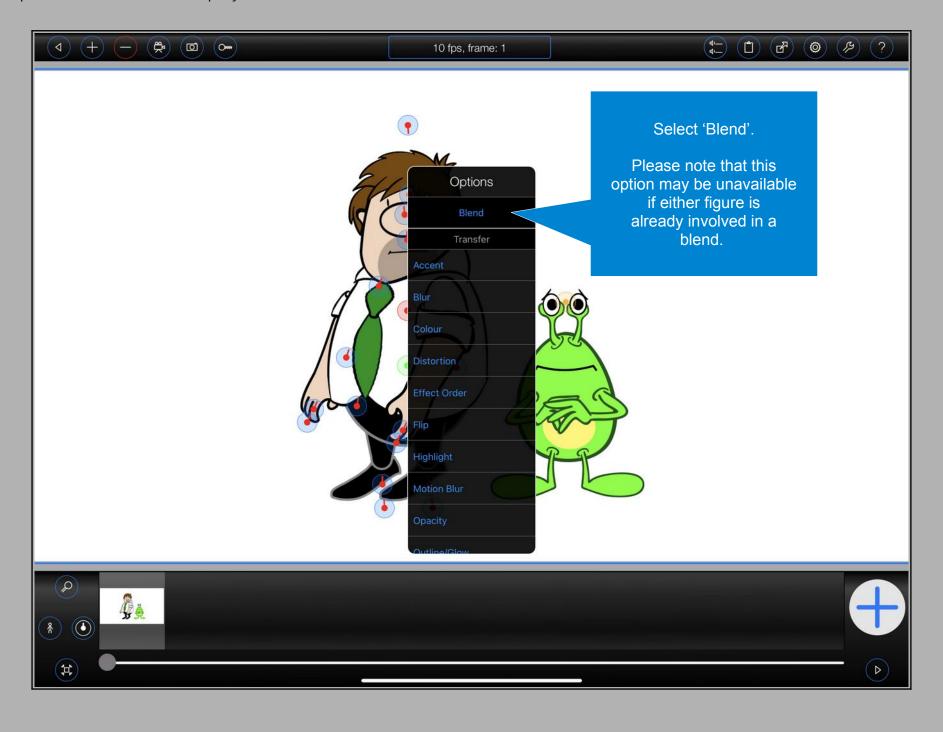




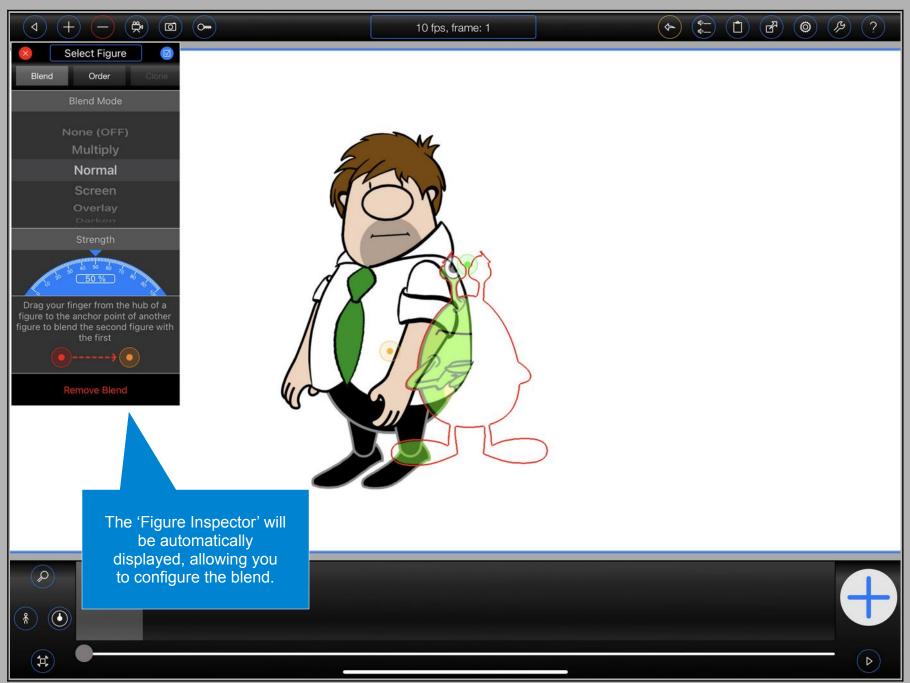
2. Drag your finger from Bob's hub to Hyoogle's anchor point:



3. An 'Options' menu will be displayed. Select 'Blend':



Animation Pro will automatically apply a 'Normal' blend at 50% strength. The figure being blended with the active/selected figure will be displayed as a red outline, as shown below. Please note that I've dragged Hyoogle over Bob to show the effect of the blend:



Blend Options

The 'Blend' category in the Figure Inspector may be used to choose the type of bend (known as the 'Blend Mode') and the strength of the blend. Here are a few examples:





In - 100%



Difference – 100%



Out - 100%

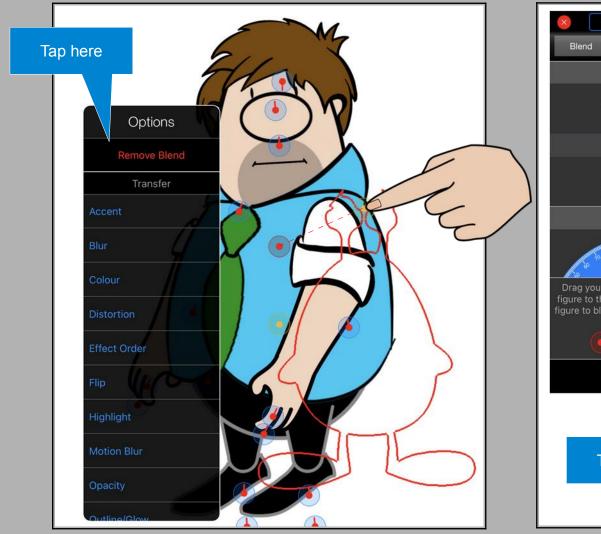
In the example shown below, an upside-down clone of Bob has been blended with a puddle to produce a reflection:

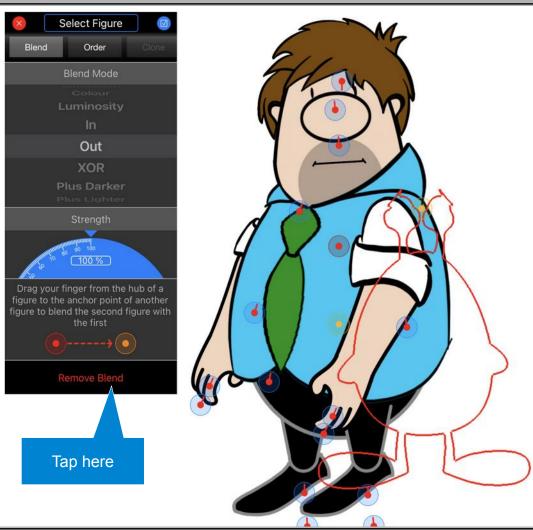


Removing Blends

Blends may be removed in a couple of ways:

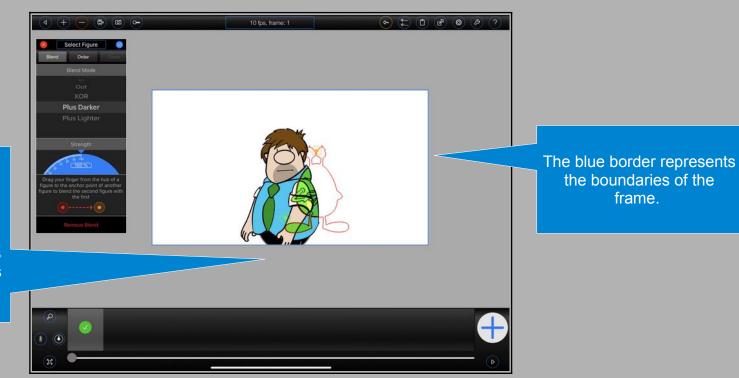
- 1. Drag your finger from the hub of the first figure to the anchor point of the second figure (just as you did when setting up the blend) and choose 'Remove Blend' from the 'Options' menu:
- 2. Select either figure involved in the blend, open the 'Figure Inspector', choose the 'Blend' category and press the 'Remove Blend' button:





Blending Limitations

- Any given figure or clone may only be blended with one other figure or clone
- The figure being blended with the active/selected figure may not have motion-blur applied to it
- Blend settings will not be retained when figures are cloned, placed in the clipboard or saved from the Animation screen
- Blend settings will not be retained when figure sequences are added to an animation
- Blending will occur after all other effects and transforms are applied to the figures
- The blending process generates an image representing the two blended figures. That image is bounded by the animation frame. Blended figures may thus appear truncated when dragged outside of the frame whilst animating:



Blended figures will appear to be truncated at the frame boundaries.

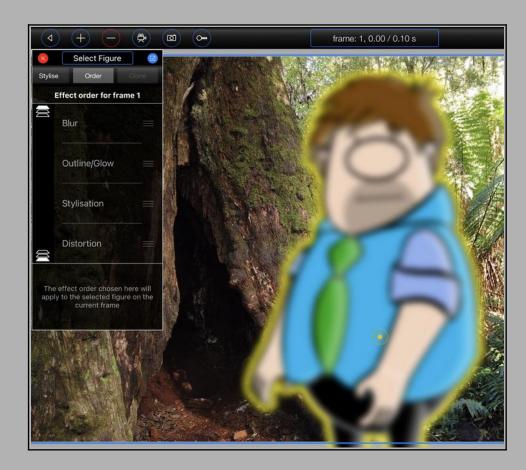
This will not cause any issues when exporting animations as this area is not captured.



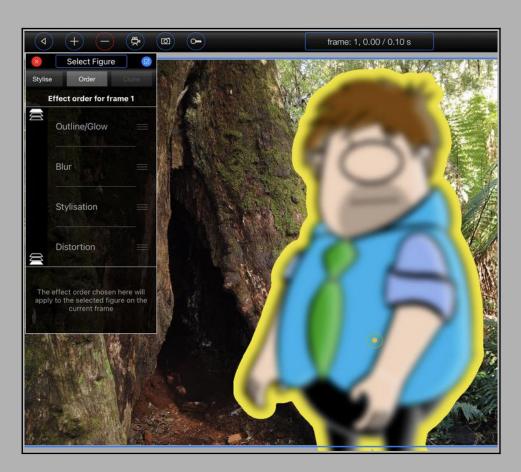
Order Category

Animation Pro has a number of effects that may be applied to the proxy images representing figures, such as outlines and blurs.

The order in which these effects are applied can produce vastly different results as shown below:

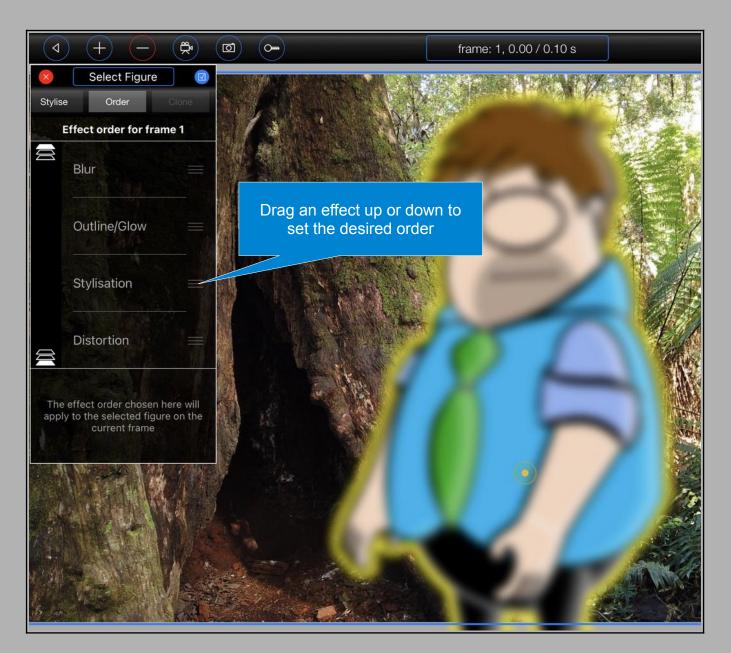


Above: Outline applied BEFORE blur



Above: Outline applied AFTER blur

The 'Order' category thus allows you to specify the order in which the figure proxy effects are applied:



Please note:

1.

The effect at the bottom of the list will be the first effect applied to the figure, the effect at the top will be the last.

2.

Any changes to the order of the effects will apply to the currently selected figure on the current frame only.

These changes will, however, be copied to any new frames created from the current frame i.e. copies of the current frame.



Clone Category

Animation Pro allows figures to be cloned. Clones can automatically copy one or more properties of the original, or parent, figure. Using clones, it is thus possible to create everything from shadows to an entire army that animate automatically as the parent figure is changed. For more information regarding clones, please refer to the 'Clones' topic (see left).

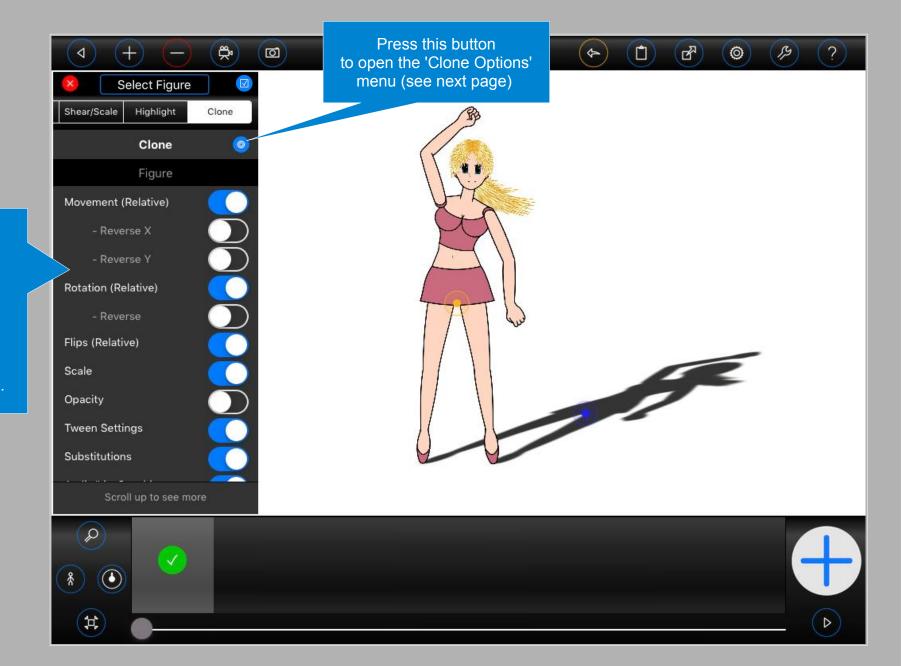
The 'Clone' category will be available whenever a clone is selected. It contains the list of properties (of the parent figure) that the clone will copy.

Please note:

- •The clone properties may be changed from frame to frame. So it's possible to have a clone copy a parent figure's movements but then go on to move by itself.
- The clone properties will be automatically copied across to new frames.
- Some clone properties are designated as 'relative'. This means that the clone will not copy the value of the parent figure's property. Instead, it will copy the degree of change made to the parent figure's property. Movement, for example, is relative. That allows a figure and its clones to be positioned at different locations but all move together whenever the parent figure is moved.
- Whenever a clone property is turned on, other that those designated as 'relative', it will not be possible to manually adjust the corresponding setting of the clone. For example, where 'Scale' is turned on, the 'Scale' options under the 'Transform' category will be unavailable when adjusting the clone.
- Some clone properties have 'reverse' options. This allows a clone to, say, automatically move down whenever the parent figure moves up (which could be very useful for creating reflections).
- A shadow is simply a clone with the right properties set up. Animation Pro includes a 'Shadow Wizard' to make the creation of shadows easier.

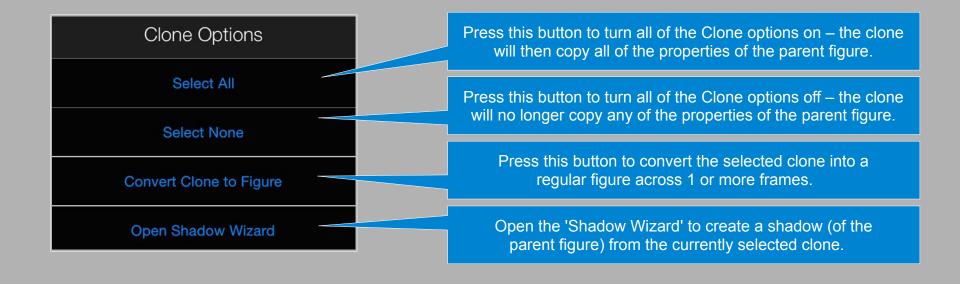
Turn these settings on or off to specify which properties of the parent figure the clone should copy.

Please note that the list may be scrolled up to reveal more properties.



'Clone Options' Menu

Press the obutton to the right of the 'Clone' heading (see last page) to open the 'Clone Options' menu:



The 'Shadow Wizard'

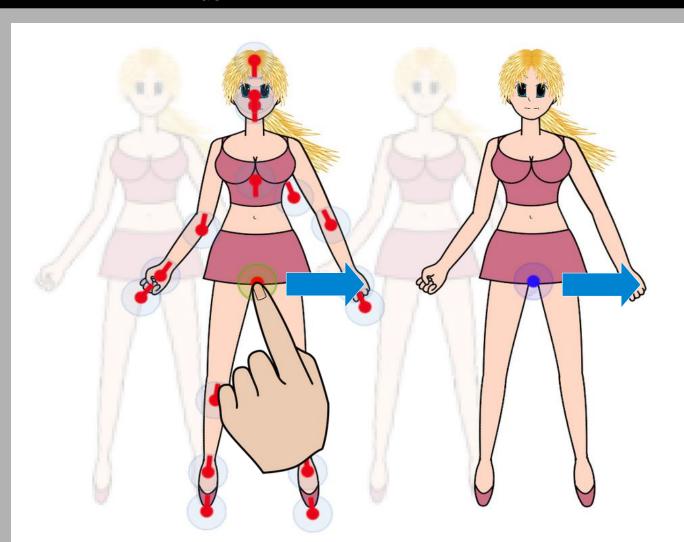
Creating a realistic shadow involves setting up a clone with the correct tinting, blur, opacity, Y-Axis shearing and scaling properties. As shadows are used quite frequently in animations, Animation Pro includes a 'Shadow Wizard' to make the process easier:



Clone Properties

The following pages describe the effects of turning each of the 'Clone' properties on:

FIGURE



Movement (Relative)

The clone will move in accordance with the parent figure's movement, relative to the clone's starting point. Clone X & Y movements may also be reversed (please see below).

- Reverse X The clone will move right whenever the parent figure moves left and vice-versa. - Reverse Y The clone will move up whenever the parent figure moves down and vice-versa. Rotation (Relative)

The clone will be rotated in accordance with the parent figure's rotation, relative to the clone's current angle. Clone rotations may also be reversed (please see below).

- Reverse The clone will rotate anti-clockwise whenever the parent figure is rotated clockwise and vice-versa.

Flips (Relative)

The clone will flip whenever the parent figure is flipped, relative to its current orientation (flip state).

Scale	The clone's scale will reflect that of the parent figure.	
Opacity	The clone's opacity will reflect that of the parent figure.	
Tween Settings	The clone will copy the parent figure's tween settings.	
Substitutions	When the parent figure is substituted, so will the clone.	
Audio/Lip-Synching	The clone will copy the parent figure's audio and lip-synching settings.	
ITEM		
Movement	The position of the items within the clone will be set to those of the parent figure.	
Bending	The items within the clone will bend as per the corresponding parent figure's items.	
Colour	The colour of the items within the clone will be set to that of the corresponding parent figure's items.	
Tint	The tint of the items within the clone will be set to that of the corresponding parent figure's items.	
Opacity	The opacity of the items within the clone will be set to that of the corresponding parent figure's items.	
Line Width	The width of the lines within the clone will be set to that of the corresponding parent figure's items.	
Image Position	The position of the images within the clone will be set to that of the corresponding parent figure's items.	
Image Rotation	The angle of the images within the clone will be set to that of the corresponding parent figure's items.	
Image Flips	The items within the clone will flip when the corresponding parent figure's items are flipped.	
Image Scale-X	The X-Axis scaling of the items within the clone will reflect that of the corresponding parent figure's items.	
Image Scale-Y	The Y-Axis scaling of the items within the clone will reflect that of the corresponding parent figure's items.	
Image Substitutions	Any substitutions made to the items within the parent figure will also be made to the items in the clone.	
Tween Settings	Any changes made to the tween settings of the parent figure will also be made to the tween settings of the clone.	

EFFECTS

Blur	The clone's blur will reflect that of the parent figure.
Distortion	The clone's distortion will reflect that of the parent figure.
- Reverse X	The clone's X-Axis distortion will be the opposite of that applied to the parent figure.
- Reverse Y	The clone's Y-Axis distortion will be the opposite of that applied to the parent figure.
Scale-X	The clone's X-Axis scaling will reflect that of the parent figure.
Scale-Y	The clone's Y-Axis scaling will reflect that of the parent figure.
Shear-X	The clone's X-Axis shearing will reflect that of the parent figure.
- Reverse	The clone's X-Axis shearing will be the opposite of that applied to the parent figure.
Shear-Y	The clone's Y-Axis shearing will reflect that of the parent figure.
- Reverse	The clone's Y-Axis shearing will be the opposite of that applied to the parent figure.
Highlight	The clone's highlighting will reflect that of the parent figure.
Accent	The clone's accent will reflect that of the parent figure.
Outline/Glow	The clone will be outlined (or will glow) in accordance with the parent figure.
Motion Blur	Motion blur will be applied to the clone in the same manner to that of the parent figure.
Stylisation	The clones will be stylised in accordance with the parent figure.
Effect Order	The clone will utilise the same 'effect order' as the parent figure.